EL MOTAMYEZ - MATH QUESTIONS BANK

FINAL REVISION

Question 01 Choose the correct answer

1. The smallest like denominator of $\frac{5}{6}$ and $\frac{1}{3}$ is ....



(a) 18 (b) 6 (c) 3 (d) 2

2. The simplest form of form of $\frac{6}{12}$ is ....

(a) $\frac{1}{2}$ (b) $\frac{2}{3}$ (c) $\frac{5}{6}$ (d) $\frac{12}{6}$

3. Estimate the sum of $\frac{1}{6} + \frac{7}{8}$ using benchmarks, ...

(a) $\frac{25}{24}$ (b) 1 (c) $\frac{1}{2}$ (d) 0

4. $\frac{2}{6}$ x 3 = ...

(a) $\frac{5}{6}$ (b) 1 (c) 36 (d) $\frac{12}{3}$

5. $3\frac{2}{5}$ x 5 = ...

(a) $\frac{17}{5}$ (b) 5 (c) 17 (d) $3\frac{10}{5}$

6. It is impossible to draw a triangle with two .... Angles .

(a) Acute (b) Obtuse (c) right (d) both b and c

7. the measure of an acute angle may be .... °

(a) 0° (b) 40° (c) 90° (d) 170°

8. $\frac{4}{11}$ x .... = $\frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{2}{11}$

(a) $\frac{14}{11}$ (b) $3\frac{1}{2}$ (c) 4 (d) $\frac{6}{11}$

9. $\frac{8}{15}$ x b = $\frac{8}{15} + \frac{8}{15} + \frac{4}{15}$, then b = ...

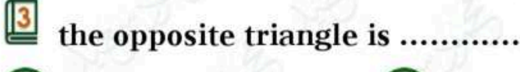
(a) $\frac{20}{15}$ (b) $3\frac{1}{2}$ (c) 3 (d) 2.5

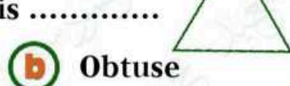
10. $7\frac{3}{4}$ hours = ... hours + ... minutes

(a) 7 , 30 (b) 7 , $\frac{1}{2}$ (c) 7 , 15 (d) 7 , 45

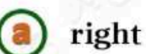
11. the opposite triangle is ....

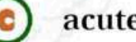


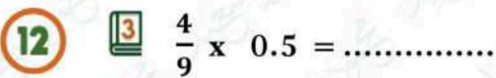




(a) right (b) Obtuse (c) acute (d) otherwise







12 $\frac{4}{9} \times 0.5 =$ ....

(a) $\frac{8}{9}$ (b) $\frac{20}{9}$ (c) 20 (d) $\frac{2}{9}$

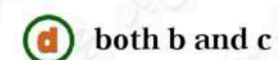


13 $\frac{8}{15} \times 0.25 =$ ....

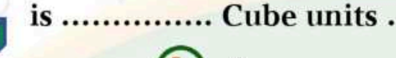
(a) $\frac{1}{4}$ (b) $\frac{25}{15}$ (c) 24 (d) $\frac{2}{15}$

14 It is impossible to draw a triangle with one .... Angles .



(a) Acute (b) Obtuse (c) right (d) both b and c



15 Volume of [figure] is .... Cube units .

(a) 3 (b) 4 (c) 5 (d) 10

16 the solid which has 5 vertices and 8 edges is ....

(a) Cone (b) Cube (c) cuboid (d) Pyramid

17 the measure of an acute angle .... the measure of an obtuse angle

(a) $<$ (b) $>$ (c) $=$ (d) otherwise

18 $8 \div e = 40$, then e = ...

(a) 40 (b) $\frac{9}{40}$ (c) 5 (d) $\frac{1}{5}$

19 $\frac{8}{9} + \frac{2}{6}$ is about $1\frac{1}{2}$, the estimation is ....

(a) overestimate (b) underestimate

20 $\frac{7}{9} - \frac{3}{9} =$ ....

(a) $\frac{4}{9}$ (b) $\frac{5}{0}$ (c) 1 (d) $\frac{10}{9}$

21 m (< A) = 40° , m (< B) = 70° , m (< C) = 70° , then it is a ....triangle .

(a) right (b) Obtuse (c) acute (d) otherwise

22 $3\frac{2}{6} \times \frac{....}{6} = 3\frac{2}{6}$

(a) $\frac{6}{6}$ (b) $3\frac{2}{6}$ (c) 6 (d) $\frac{1}{3}$

23 $\frac{6}{6} \times 2 =$ ....

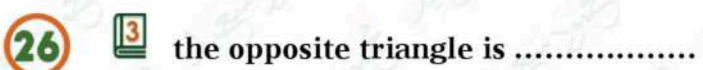
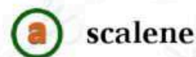
(a) $\frac{6}{6}$ (b) $2\frac{1}{6}$ (c) 2 (d) $\frac{5}{2}$

24 $3\frac{1}{2}$ hours = ... hours + ... minutes

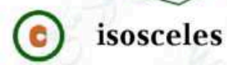
(a) 3 , 30 (b) 3 , $\frac{1}{2}$ (c) 3 (d) 4 , 2

25 $\frac{1}{5} \div 7 =$ ....

(a) 1 (b) $\frac{1}{35}$ (c) 35 (d) $\frac{5}{7}$

26 the opposite triangle is ....



ⓐ scalene ⓑ Equilateral ⓒ isosceles ⓓ otherwise

27 Data can be represented by ....

ⓐ Line plot ⓑ Pie graph ⓒ pictograph ⓓ All of them

28 .... Triangle has 2 acute angles and 1 right angle .

ⓐ right ⓑ Obtuse ⓒ right ⓓ otherwise

29 the measure of an obtuse angle is .... 90°

ⓐ < ⓑ > ⓒ = ⓓ otherwise

30 the number of horizontal layer is ....

ⓐ 3 ⓑ 4 ⓒ 5 ⓓ 10

31 the cube has .... Faces .

ⓐ 12 ⓑ 6 ⓒ 0 ⓓ 8

32 18 months = ... Year

ⓐ $\frac{18}{12}$ ⓑ $3\frac{1}{6}$ ⓒ 3 ⓓ All of them

33 the simplest form of $4\frac{2}{10}$ is ....

ⓐ $4\frac{3}{4}$ ⓑ $4\frac{1}{5}$ ⓒ $\frac{42}{10}$ ⓓ $2\frac{3}{4}$

34 $\frac{25}{8}$ is equivalent to ....

ⓐ $2\frac{1}{8}$ ⓑ $3\frac{1}{25}$ ⓒ $3\frac{1}{8}$ ⓓ $\frac{8}{25}$

35 $3\frac{5}{6}$ is equivalent to ....

ⓐ $2\frac{5}{6}$ ⓑ $4\frac{1}{25}$ ⓒ $3\frac{1}{6}$ ⓓ $\frac{23}{6}$

36 $3\frac{2}{6}$ is equivalent to ....

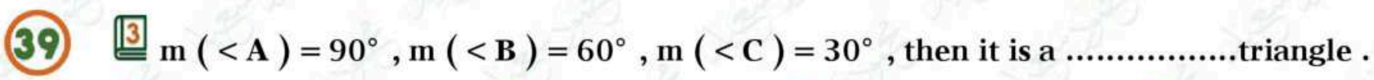
ⓐ $2\frac{8}{6}$ ⓑ $3\frac{1}{6}$ ⓒ $2\frac{2}{6}$ ⓓ $\frac{23}{6}$

37 $8\frac{8}{8}$ is equivalent to ....

ⓐ $9\frac{5}{6}$ ⓑ $8\frac{1}{8}$ ⓒ 81 ⓓ 9

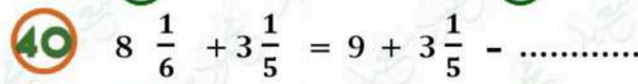
38 $4\frac{2}{10}$ is equivalent to ....

ⓐ $4\frac{20}{100}$ ⓑ $4\frac{1}{5}$ ⓒ $\frac{42}{10}$ ⓓ All of them



39 m (< A) = 90° , m (< B) = 60° , m (< C) = 30° , then it is a ....triangle .

(a) right (b) Obtuse (c) acute (d) otherwise



40 $8\frac{1}{6} + 3\frac{1}{5} = 9 + 3\frac{1}{5} -$ ....

(a) $12\frac{1}{5}$ (b) $4\frac{1}{5}$ (c) $\frac{5}{6}$ (d) $\frac{1}{6}$

41 the volume of this solid is .... Cube units .

(a) 12 (b) 3 (c) 2 (d) 9

42 .... Triangle has 2 acute angles and 1 obtuse angle .

(a) right (b) Obtuse (c) right (d) otherwise

43 the measure of a right angle is .... °

(a) 0° (b) 40° (c) 90° (d) 180°

44 $\frac{4}{6} \times \frac{4}{9} \times \frac{3}{16} =$ ....

(a) $\frac{124}{186}$ (b) $2\frac{2}{16}$ (c) 3 (d) $\frac{1}{18}$

45 $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times$ .... $= \frac{1}{4}$

(a) 4 (b) 2 (c) 3 (d) 1

46 $8\frac{1}{6} + 3\frac{1}{5} = 9 + 3 + \frac{1}{5} -$ ....

(a) $12\frac{1}{5}$ (b) $4\frac{1}{5}$ (c) $\frac{5}{6}$ (d) $\frac{1}{6}$

47 $\frac{8}{7} \times 3 = 4 \times \frac{.....}{7}$

(a) 8 (b) 4 (c) 3 (d) 6

48 $\frac{16}{9} \times \frac{3}{4}$ .... $\frac{2}{6} \times \frac{3}{8}$

(a) < (b) > (c) = (d) otherwise

49 m (< G) = 110°, m (< D) = 35°, m (< F) = 35°, then it is an ....triangle

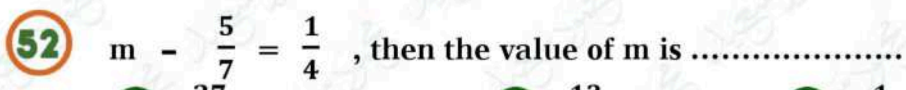
(a) right (b) Obtuse (c) acute (d) otherwise

50 $4\frac{2}{3} + 3\frac{9}{10}$ is estimated as ....

(a) $4\frac{1}{2} + 4$ (b) $1 + \frac{1}{2}$ (c) $4 + \frac{1}{2}$ (d) $31 + 4\frac{1}{2}$

51 Length x width x height = ...

(a) Area (b) Perimeter (c) volume (d) Base area



52 $m - \frac{5}{7} = \frac{1}{4}$, then the value of m is ....

ⓐ $\frac{27}{28}$ ⓑ $\frac{13}{28}$ ⓒ $\frac{1}{4}$ ⓓ $\frac{5}{7}$

53 $\frac{7}{14} + e = 1$, then the value of e is ....

ⓐ $\frac{8}{14}$ ⓑ $\frac{1}{2}$ ⓒ $\frac{5}{14}$ ⓓ $\frac{5}{7}$

54 $\frac{11}{16} - a = \frac{1}{4}$, then the value of a is ....

ⓐ $\frac{8}{16}$ ⓑ $\frac{7}{16}$ ⓒ $\frac{10}{12}$ ⓓ $\frac{6}{6}$

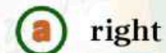
55 $\frac{12}{20}$ is equivalent to ....

ⓐ $\frac{8}{10}$ ⓑ $\frac{3}{5}$ ⓒ $\frac{10}{12}$ ⓓ $\frac{6}{5}$

56 $4\frac{1}{12}$ years = ... years + ... months

ⓐ 4 , 2 ⓑ 4 , $\frac{1}{12}$ ⓒ 4 , 1 ⓓ 4 , 12

57 .... Triangle has 3 acute angles and 0 obtuse angle .



ⓐ right ⓑ Obtuse ⓒ acute ⓓ otherwise

58 the measure of an obtuse angle may be .... °

ⓐ 0° ⓑ 40° ⓒ 90° ⓓ 110°

59 $\frac{3}{4} - \frac{3}{8}$ .... $\frac{7}{25} \times \frac{5}{21}$

ⓐ < ⓑ > ⓒ = ⓓ otherwise

60 $2\frac{2}{6} \times \frac{3}{7}$ = ...

ⓐ $\frac{14}{21}$ ⓑ $3\frac{1}{2}$ ⓒ 1 ⓓ $\frac{14}{6}$

61 AB = BC = 6.32 cm , AC is less than them , then it is an ....triangle .

ⓐ scalene ⓑ Equilateral ⓒ isosceles ⓓ otherwise

62 the volume of this solid is .... Cubes.

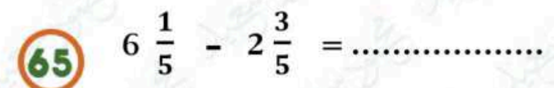
ⓐ 3 ⓑ 4 ⓒ 5 ⓓ 10

63 the sum of the measures of angles around at a point is equal ....°

ⓐ 270 ⓑ 90 ⓒ 360 ⓓ 180

64 $5\frac{2}{8} + 3\frac{6}{8}$ = ...

ⓐ 9 ⓑ $8\frac{1}{6}$ ⓒ $8\frac{4}{6}$ ⓓ $\frac{4}{6}$



65 $6\frac{1}{5} - 2\frac{3}{5} = \dots\dots\dots$

a) $4\frac{4}{5}$ b) $4\frac{2}{5}$ c) $3\frac{3}{5}$ d) $\frac{31}{5}$



66 $3\frac{1}{8} + 2\frac{3}{8} = \dots\dots\dots$

a) $5\frac{4}{5}$ b) $5\frac{1}{2}$ c) $1\frac{4}{8}$ d) $1\frac{2}{8}$

67 $9\frac{3}{9} - 3\frac{1}{3} = \dots\dots\dots$

a) $6\frac{2}{3}$ b) $6\frac{7}{9}$ c) $6\frac{1}{9}$ d) 6



68 $3\frac{2}{3} \times \frac{1}{5} = \frac{1}{5} \times 3 + \frac{1}{5} \times \dots\dots$

a) $\frac{2}{3}$ b) $3\frac{2}{3}$ c) 3 d) $\frac{8}{3}$



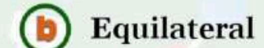
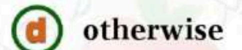
69 45 minutes = ... Hours

a) $\frac{1}{2}$ b) $\frac{1}{4}$ c) 1 d) $\frac{3}{4}$

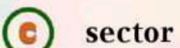
70 base area x height = ...

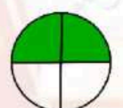
a) Area b) Perimeter c) volume  d) Base area 

71 .... Triangle has 3 different sides .

a) scalene  b) Equilateral  c) isosceles  d) otherwise 

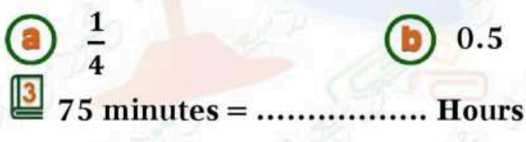
72 A ....is bounded by an arc and two radii .

a) Height  b) Pie graph  c) sector  d) Bar graph 



73 the colored part represent .... Of the circle .

a) $\frac{1}{4}$ b) 0.5 c) $\frac{3}{4}$ d) 0.25




74 75 minutes = ... Hours

a) $\frac{1}{2}$ b) $1\frac{1}{4}$ c) 1 d) $\frac{3}{4}$

75 Which is equal to $6 \times \frac{3}{9}$

a) 2  b) $3 \times \frac{6}{9}$ c) $18 \times \frac{1}{9}$ d) all of them

76 $5 + \frac{3}{5} + \frac{2}{5} = \dots\dots\dots$

a) $5\frac{2}{5}$  b) 6 c) $\frac{18}{4}$  d) 4

77. $\frac{2}{3} + \frac{7}{12} = 1 +$ ....

(a) $\frac{2}{5}$ (b) $\frac{1}{4}$ (c) $\frac{1}{3}$ (d) $\frac{1}{5}$

78. $\frac{1}{4} + \frac{3}{12} = 1 -$ ....

(a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{1}{3}$ (d) $\frac{1}{5}$

79. $3\frac{3}{4}$ = ... $\div 4$

(a) 12 (b) 4 (c) 3 (d) 15

80. .... $= 13 \div 5$

(a) 2 (b) 5 (c) $2\frac{3}{5}$ (d) 18

81. $\frac{1}{2}$ year = ... Months

(a) 5 (b) 6 (c) 2 (d) 1

82. $8\frac{1}{9} + 3\frac{5}{12}$ is estimated as ....

(a) $8\frac{1}{2} + 3$ (b) $8 + 3\frac{1}{2}$ (c) $0 + \frac{1}{2}$ (d) $8\frac{1}{2} + 3.5$

83. $8\frac{1}{6} + 3.5$ = ...

(a) $11\frac{2}{3}$ (b) $11\frac{1}{6}$ (c) $4\frac{2}{3}$ (d) 5

84. volume ÷ height = ...

(a) Height (b) Width (c) volume (d) Base area

85. .... Triangle has 2 same sides and 1 different .

(a) scalene (b) Equilateral (c) isosceles (d) otherwise

86. $4\frac{3}{7}$ + ... $= 5\frac{1}{3}$

(a) $9\frac{4}{21}$ (b) $1\frac{16}{21}$ (c) 1 (d) $\frac{19}{21}$

87. $m - 7\frac{2}{12} = 3\frac{1}{4}$, then the value of m is ....

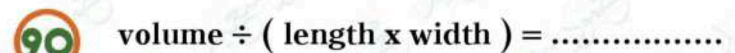
(a) $10\frac{5}{12}$ (b) $3\frac{11}{12}$ (c) 4 (d) $4\frac{1}{8}$

88. $a + 6\frac{4}{12} = 9\frac{3}{4}$, then the value of a is ....

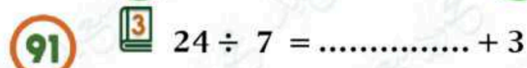
(a) $3\frac{5}{12}$ (b) $15\frac{7}{12}$ (c) 2.5 (d) $16\frac{1}{12}$

89. $5\frac{1}{5} - e = 3\frac{1}{5}$, then the value of e is ....

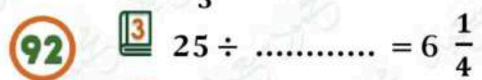
(a) $2\frac{2}{5}$ (b) $1\frac{3}{5}$ (c) $1\frac{4}{5}$ (d) $8\frac{4}{5}$

90 volume ÷ (length x width) = ...



ⓐ Height ⓑ Width ⓒ volume ⓓ Base area

91 $24 \div 7 =$ .... + 3



ⓐ $\frac{3}{3}$ ⓑ $\frac{1}{8}$ ⓒ 3 ⓓ $\frac{3}{7}$

92 $25 \div$ .... $= 6\frac{1}{4}$



ⓐ 6 ⓑ $\frac{1}{4}$ ⓒ 4 ⓓ $\frac{6}{25}$

93 $\frac{2}{3} + \frac{7}{12}$ is estimated as ....

ⓐ $\frac{1}{2}+\frac{1}{2}$ ⓑ $\frac{1}{2}+1$ ⓒ $0+\frac{1}{2}$ ⓓ $1+1$

94 $\frac{8}{9} + \frac{1}{100}$ is estimated as ....

ⓐ $\frac{1}{2}+\frac{1}{2}$ ⓑ $\frac{1}{2}+1$ ⓒ $0+\frac{1}{2}$ ⓓ $1+0$

95 $2 - \frac{2}{5} - \frac{1}{5} =$ ....

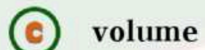
ⓐ $1\frac{2}{5}$ ⓑ $\frac{2}{5}$ ⓒ $\frac{2}{3}$ ⓓ 1

96 $7\frac{m}{10}$ is slightly greater than $7\frac{1}{2}$, then m can be ....



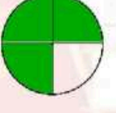
ⓐ 11 ⓑ 5 ⓒ 6 ⓓ 1

97 volume ÷ (length x height) = ...

ⓐ Height ⓑ Width ⓒ volume ⓓ Base area

98 the measure of this central angle is ....°





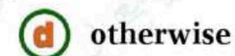
ⓐ 360 ⓑ 270 ⓒ 90 ⓓ 180

99 $\frac{1}{8} + \frac{6}{5}$ is about 1 , the estimation is ....

ⓐ overestimate ⓑ underestimate

100 the measure of an obtuse angle .... the measure of a right angle




ⓐ < ⓑ > ⓒ = ⓓ otherwise

101 $\frac{1}{6}$ year = ... Months



ⓐ 5 ⓑ 6 ⓒ 2 ⓓ 1

102 the angle whose vertex is the center of the circle is called ....angle .


ⓐ Centeral ⓑ Circular ⓒ right ⓓ Straight

103 $\frac{2}{8} + \frac{6}{8} =$ ....


ⓐ $\frac{4}{6}$ ⓑ $\frac{2}{3}$ ⓒ 1 ⓓ $\frac{6}{8}$

104. $3\frac{12}{c}$ is slightly greater than 4 , then c can be ....

a) 11 b) 9 c) 13 d) 12

105. If the volume of a cuboid = 30 cm3 and base area = 15 cm2 , then it's height is .... Cm

a) 5 b) 2 c) 15 d) 150

106. 3 $4 \div \frac{1}{4}$ .... $\frac{1}{4} \div 4$

a) < b) > c) = d) otherwise

107. $\frac{1}{5}$ hour = ... Minutes

12 b) 7 c) 5 d) 1

108. $\frac{5}{9} + \frac{4}{7}$ is about 1 , the estimation is ....

a) overestimate b) underestimate

109. $\frac{1}{...?....} = \frac{8}{24}$

a) 0 b) 2 c) 3 d) 1

110. $\frac{1}{4} + \frac{3}{16}$ = ...

a) $\frac{7}{16}$ b) 0 c) 16 d) $\frac{4}{20}$

111. $1\frac{1}{8}$ day = ... hours

a) 24 b) 8 c) 27 d) 2

112. 3 .... $\div \frac{1}{6}$ = 24

a) 4 b) $\frac{1}{4}$ c) 36 d) $\frac{6}{24}$

113. 3 $\frac{1}{8} \div m = \frac{1}{32}$, then m= ....

a) 4 b) $\frac{1}{4}$ c) 32 d) $\frac{8}{32}$

114. A ....is a circle divided into sectors .

a) Height b) Pie graph c) sector d) Bar graph

115. 3 the measure of an acute angle .... the measure of a right angle

a) < b) > c) = d) otherwise

116. Estimate the difference of $\frac{9}{11} - \frac{2}{5}$ using benchmarks, ...

a) $\frac{7}{6}$ b) $\frac{1}{2}$ c) 0 d) 1

117 The LCM of denominators of $\frac{4}{7}$ and $\frac{2}{5}$ is ....

(a) 7 (b) 35 (c) 5 (d) $\frac{6}{35}$

118 90 minutes = ... hours

(a) $12\frac{1}{2}$ (b) $3\frac{1}{2}$ (c) 30 (d) $1\frac{1}{2}$

119 $\frac{1}{4} \div \frac{1}{2}$ = ...

(a) 4 (b) $\frac{1}{4}$ (c) 8 (d) $\frac{1}{2}$

120 $10 \div \frac{1}{5}$ = ...

(a) 2 (b) $\frac{1}{5}$ (c) 50 (d) $\frac{5}{10}$

121 $1 - \frac{3}{5} - \frac{2}{5}$ = ...

(a) 0 (b) 2 (c) $\frac{5}{5}$ (d) 1

122 $\frac{2}{5} = \frac{....}{15}$

(a) 0 (b) 2 (c) 3 (d) 6

123 $\frac{1}{...?...} = \frac{12}{24}$

(a) 0 (b) 2 (c) 3 (d) 1

124 $8 \div \frac{1}{4}$ .... $4 \div \frac{1}{8}$

(a) < (b) > (c) = (d) otherwise

125 $\frac{1}{5} + \frac{2}{3}$ = ...

(a) $\frac{13}{15}$ (b) $\frac{3}{8}$ (c) 0 (d) $\frac{1}{2}$

126 ....+ $\frac{5}{8}$ = 1

(a) $\frac{4}{8}$ (b) $\frac{3}{8}$ (c) 0 (d) $\frac{1}{2}$

127 .... + $\frac{5}{10}$ = 1

(a) $\frac{1}{2}$ (b) $\frac{5}{10}$ (c) $\frac{4}{8}$ (d) all of them

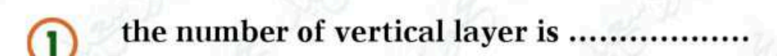
128 1 - .... = 0

(a) $\frac{1}{2}$ (b) $\frac{10}{10}$ (c) $\frac{2}{3}$ (d) 0

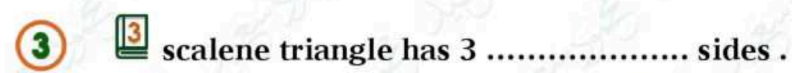
129 1 - .... = 1

(a) $\frac{1}{2}$ (b) $\frac{10}{10}$ (c) $\frac{0}{3}$ (d) 1

Question 02 complete

1. 
the number of vertical layer is .... 

2. $\frac{3}{12} \times \frac{3}{8} \times \frac{2}{6} =$ ....

3. 
scalene triangle has 3 .... sides .

4. $4\frac{4}{8} \times \frac{......}{8} = 4\frac{1}{2}$

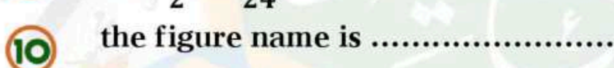
5. $\frac{2}{8} \times 3 \times \frac{2}{6} =$ ....

6. $\frac{100}{100} \times 5\frac{6}{12} =$ ....

7. $3\frac{2}{5} \times 5 = 5 \times$ ....

8. $\frac{2}{5} \times 3 = 6 \times$ ....

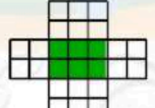
9. $\frac{3}{2} \times \frac{12}{24} =$ ....

10. 
the figure name is .... 

11. $\frac{2}{11} \times$ ....$= \frac{3}{11}$

12. .... $\times \frac{3}{8} \times \frac{2}{6} = \frac{3}{8}$

13. $\frac{2}{3} \times$ .... $= \frac{6}{12}$

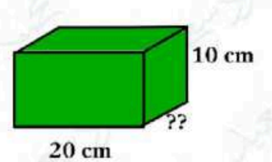
14. Volume = ...x........x......... 

15. .... $\times \frac{5}{6} = \frac{10}{24}$

16. .... Triangle has 3 acute angles and 0 right angle .

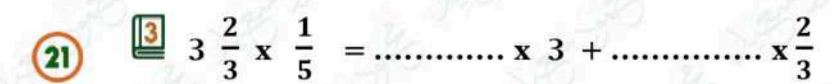
17. $\frac{3}{5} \times 1.5 \times 30 =$ ....

18. if the volume = 1200 cm3 , then the missing dimension is ....cm



19. $\frac{4}{11} \times$ .... $= \frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{2}{11}$

20. $3\frac{3}{5} \times$ .... $= 1$



21. $3\frac{2}{3} \times \frac{1}{5}$ = ... x 3 + ... x $\frac{2}{3}$

22. 15 minutes = ... Hours

23. .... minutes = $\frac{1}{2}$ Hours

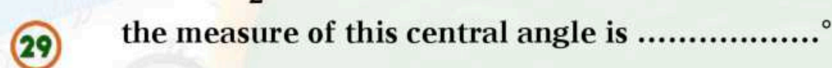
24. 2 ÷ 4 = ...

25. 23 ÷ 4 = ...

26. 34 ÷ 5 = 6 + ...

27. 40 ÷ .... = $4\frac{4}{9}$

28. 18 ÷ $\frac{1}{2}$ = 18 x ....



29. the measure of this central angle is ....°



30. $\frac{4}{11}$ x .... = $\frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{4}{11}$

31. d ÷ $\frac{1}{5}$ = $\frac{1}{2}$, then d = ...

32. $\frac{1}{7}$ ÷ n = $\frac{1}{21}$, then n = ...

33. 6 ÷ f = 24 , then f = ...

34. Any triangle has at least .... Acute angles .

35. Volume of [figure] is .... Cube units .

36. .... Triangle has 3 acute angles .

37. $\frac{1}{6} + \frac{3}{6}$ = ... In simplest form

38. color $\frac{1}{4}$ of the circle .

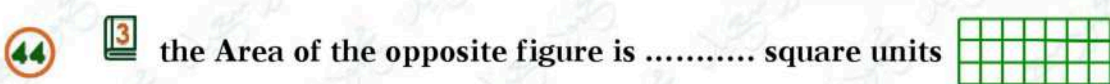
39. the measure of a right angle is .... 90°

40. the sum of all decimals in one circle = ...

41. the measure of an obtuse angle is .... 90°

42. the triangle has ....sides and ....angles

43. The simplest form of form of $\frac{2}{24}$ is ....



44. the Area of the opposite figure is .... square units 

45. the sphere has .... vertex .

46. the measure of an acute angle is .... 90°

47. $\frac{2}{6}$ x 2.5 = ...

48. ....is a flat surface of a solid figure .

49. $\frac{5}{8}$ x 0.4 = ...

50. .... Triangle has 3 equal sides .

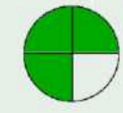
51. volume ÷ base area = ...

52. volume ÷ (width x height) = ...

53. $\frac{2}{3}$ year = ... Months

54. If the volume of a cuboid = 400 cm3, it's length = 10 cm , it's height = 5 cm, then it's width is .... Cm

55. A ....is a part of a circular region .

56. the colored part represent .... Of the circle 

57. Color $\frac{1}{2}$ of the circle .

58. $30 \div \frac{1}{3}$ = ...

59. .... ÷ $\frac{1}{5}$ = 25

60. the sum of all fractions in one circle = ...

61. 7 $\frac{8}{8}$ is equivalent to ....

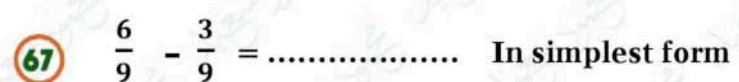
62. 90 seconds = ... minutes

63. The smallest same denominator of $\frac{1}{4}$ and $\frac{3}{8}$ is ....

64. $\frac{1}{\dots\dots} = \frac{2}{8}$

65. Estimate the sum of $\frac{1}{6} + \frac{6}{7}$ using benchmarks, ...

66. The LCM of denominators of $\frac{4}{5}$ and $\frac{2}{25}$ is ....



67. $\frac{6}{9} - \frac{3}{9}$ = ... In simplest form

68. .... + $\frac{2}{9}$ = 1

69. ABC is an equilateral triangle where AB = 4 cm , then AC = ...And BC = ...

70. $3 + \frac{1}{8} + \frac{7}{8}$ = ...

71. $R - \frac{2}{6} = \frac{1}{3}$, then the value of R is ....

72. $\frac{1}{4} + \frac{3}{4} = 1 -$ ....

73. $\frac{1}{12}$ year = ... Months

74. $2\frac{1}{4}$ hours = ... hours + ... minutes

75. 24 months = ... Year

76. 120 seconds = ... minutes

77. $\frac{3}{2}$ x 2 = ...

78. $2\ \frac{2}{5}$ x 3 = ...

79. $\frac{8}{9}$ x 0.125 = ...

80. $1 - \frac{3}{8} - \frac{2}{8}$ = ...

81. color $\frac{1}{8}$ of the circle .

Question 03 Answer the following

1. find the volume of this solid .

4 cm
3 cm
20 cm

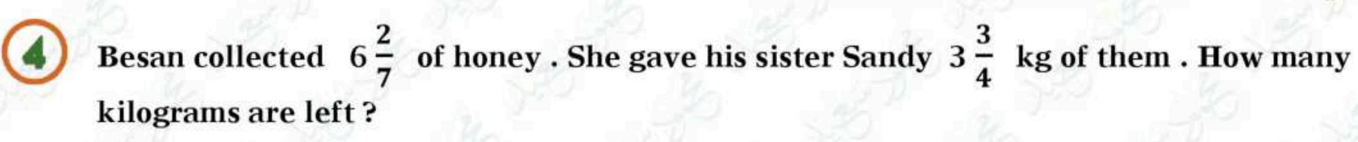
....

2. Mohamed bought a book by $\frac{1}{3}$ of his money and a candy by $\frac{2}{7}$ of his money and saved the left money . What fraction of money does Mohamed save ?

....

3. Yara's garden consists of $\frac{3}{8}$ poppies , $\frac{1}{4}$ roses and flowers in the rest of the garden what fraction of the flowers in the garden ?

....



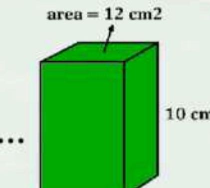
4. Besan collected $6\frac{2}{7}$ of honey . She gave his sister Sandy $3\frac{3}{4}$ kg of them . How many kilograms are left ?

....

5. Yousef spent $\frac{5}{6}$ of his money for buying candy and $\frac{3}{4}$ for buying clothes . Write their fractions with like denominators .

....

6. find the volume of this solid .



....

7. Lena ate $1\frac{3}{4}$ kg of fruits , Yasin ate $\frac{1}{5}$ kg more than Lena and Jana ate $\frac{3}{10}$ kg less than Yasin . How many kilograms did Jana eat ?

....

8. Seif studied MATH for $3\frac{1}{4}$ hours and science for 30 minutes . How many hours did Seif study in all ?

....

9. Esraa notice that $\frac{1}{3}$ of the 9 rose bushes are in bloom . How many rose bushes are in bloom ?

....

10. Maya ate $\frac{1}{4}$ of 24 candies . How many candies are left ?

....

11. write three different multiplication expressions that have the same product as $5 \times \frac{4}{8}$

....

12. Dareen bought $3\frac{1}{8}$ liters of water for $\frac{4}{5}$ for each liter . How much money did Dareen pay ?

....

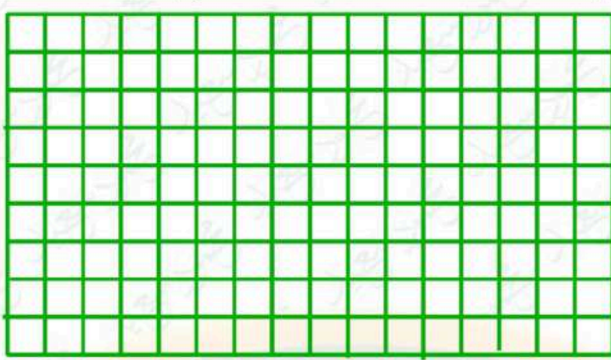
13. Mohamed bought 3 bags of meat . Each bag has a mass of $2\frac{1}{9}$ kg . If he gave $4\frac{2}{3}$ kg to Rozana . How many kilograms left ?

....



14 **Draw two different rectangles with an area 24 square units .**





15 A rectangular room of $1\frac{1}{4}$ m wide and 4 m longe . Find the area .



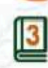
....

16 Mr Mahmoud Elkholy is reading achapter book in MATH . He can read $10\frac{2}{3}$ pages in 1 hour . How many pages will he read in 15 minutes ?



....

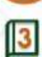
17 If the price of 16 candies 26 L.E. .find the price of each one .



....

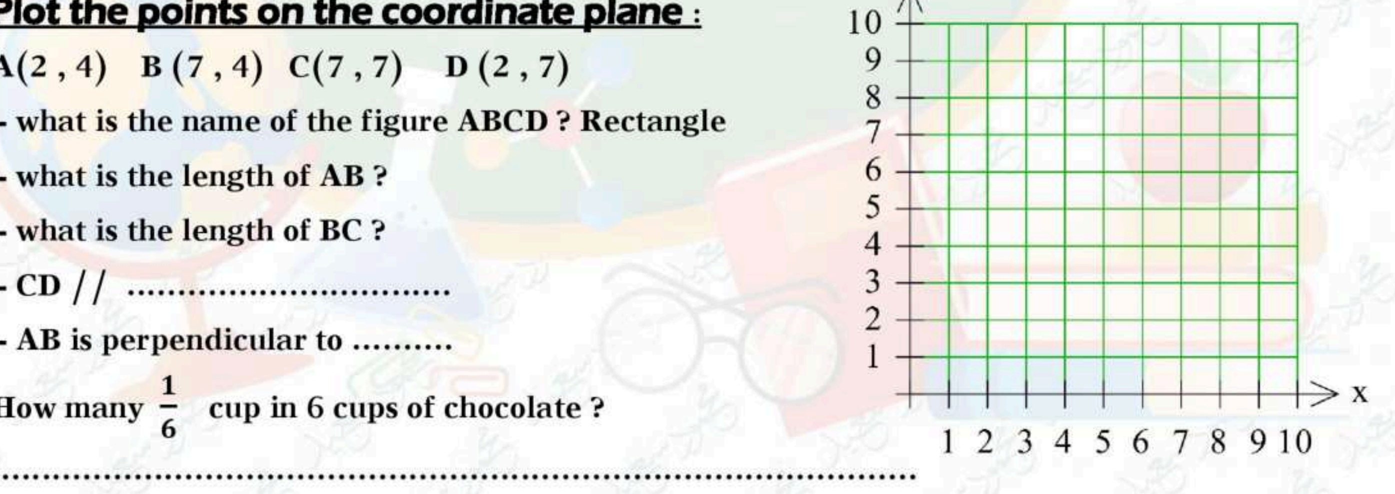


18 **Plot the points on the coordinate plane :**



A(2 , 4) B (7 , 4) C(7 , 7) D (2 , 7)

- what is the name of the figure ABCD ? Rectangle
- what is the length of AB ?
- what is the length of BC ?
- CD // ....
- AB is perpendicular to ....





19 How many $\frac{1}{6}$ cup in 6 cups of chocolate ?

....

20 Mr Mahmoud Elkholy wants to give $\frac{1}{5}$ of a box candies to each student he has 9 boxes . To how many students will he be able to give candies ?

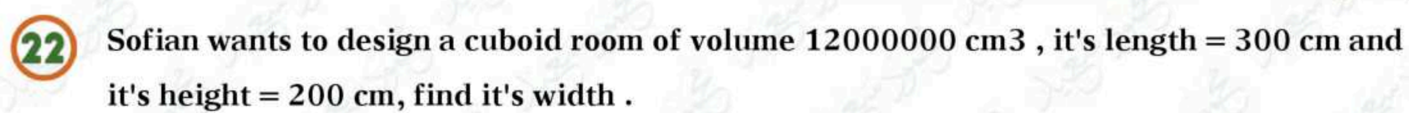
....

21 **Find the area of the opposite rectangle .**

8 cm

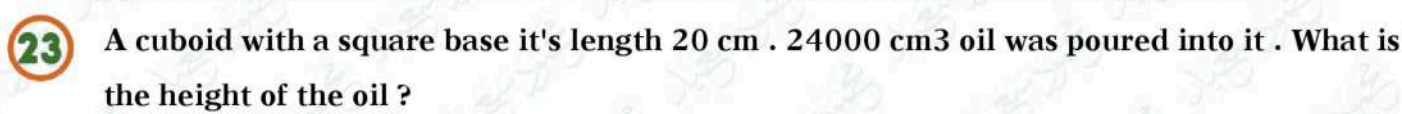
$3\frac{1}{2}$ cm

....



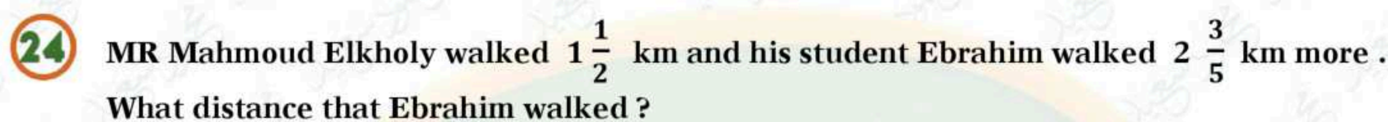
22 Sofian wants to design a cuboid room of volume 12000000 cm3 , it's length = 300 cm and it's height = 200 cm, find it's width .

....



23 A cuboid with a square base it's length 20 cm . 24000 cm3 oil was poured into it . What is the height of the oil ?

....



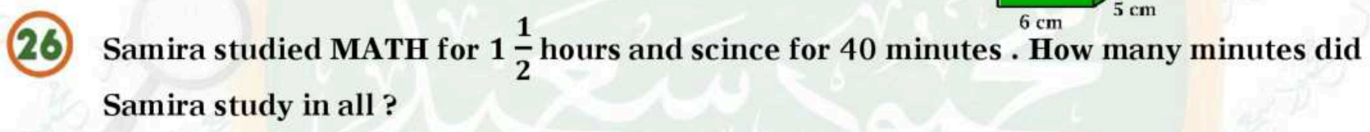
24 MR Mahmoud Elkholy walked $1\frac{1}{2}$ km and his student Ebrahim walked $2\frac{3}{5}$ km more . What distance that Ebrahim walked ?

....

25 if the volume = 300 cm3 , find the height of this solid .

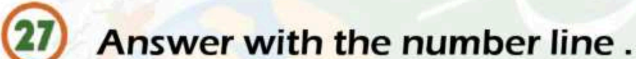
....

???
6 cm
5 cm

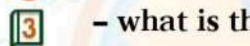


26 Samira studied MATH for $1\frac{1}{2}$ hours and scince for 40 minutes . How many minutes did Samira study in all ?

....

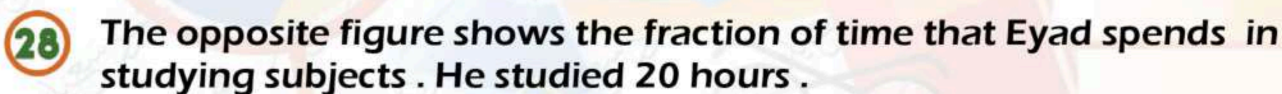


27 *Answer with the number line .*



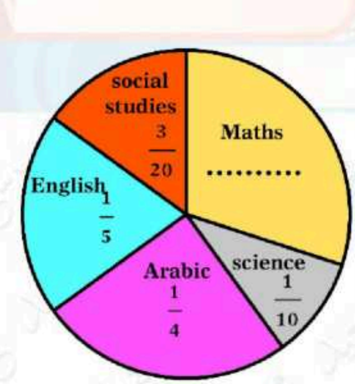
- what is the value of A ?
- what is the value of B ?
- what is the value of C ?
- what is the distance between A and C ?

0 A B C 10



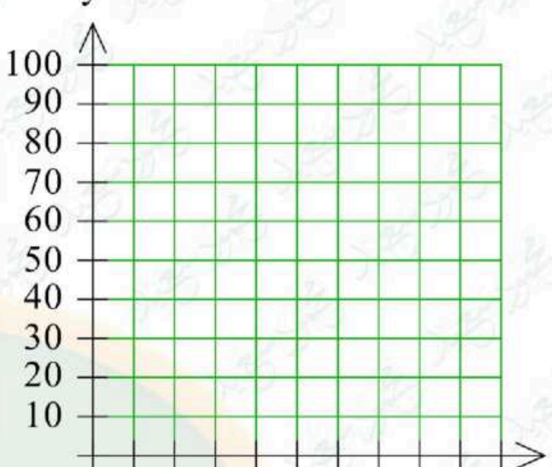
28 *The opposite figure shows the fraction of time that Eyad spends in studying subjects . He studied 20 hours .*

- what's the decimal of the time that Eyad spends in studying Maths ?
- what's the fraction of the time that Eyad spends in studying Maths ?
- what's the measure of the central angle of science ?
- what's the measure of the central angle of Arabic ?
- How many hours did he study English ?
- How many hours did he study Arabic ?
- How many hours did he study science ?



29 Ahmed's car consumes 1 Liter of petrol to cover 5 km , complete the table and graph the points on the grid .

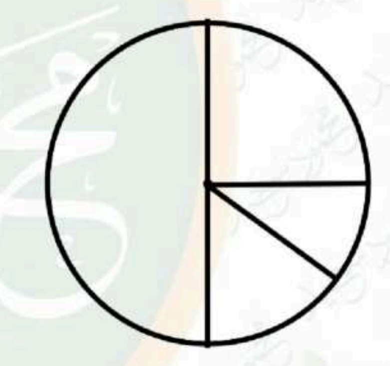
Petrol	Distance
1	5
2	10
4	20
6	30
9	45
10	50



- How many liters are needed to cover 40 km ?
- 12 liters can be consumed to cover .... Km

30 Represent these data by the opposite pie chart .

Rate	excellent	good	pass	weak
Fraction	$\frac{3}{20}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{10}$



- If the total number of students is 100 students ,

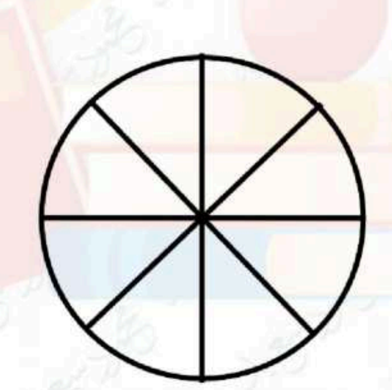
1- find the number of good students .

2- find the number of pass students .

3- find the number of week students .

4 - find the number of excellent students .

31 In the opposite circle . This represents 80 students .



- Shade $\frac{1}{2}$ of the circle green .
- Shade $\frac{1}{8}$ of the circle red .
- Shade $\frac{1}{4}$ of the circle blue .
- Shade $\frac{1}{8}$ of the circle yellow .
- what decimal of the group is blue ?
- what decimal of the group is green ?
- what decimal of the group is green ?
- How many students do the green represent ?
- How many students do the blue represent ?
- How many students do the black and red represent ?

انتهت الأسئلة مع أطيب الامنيات بالنجاح والتوفيق

الصف
الخامس
الابتدائي
٢٠٢٣

بنك أسئلة

المتميز

أ/ محمود سعيد

Model Answers

Math

5
الصف
الخامس

second term final revision

By

MR . Mahmoud Elkhouly









EL MOTAMYEZ - MATH QUESTIONS BANK

FINAL REVISION

Question 01 Choose the correct answer

1. The smallest like denominator of $\frac{5}{6}$ and $\frac{1}{3}$ is ....

   (a) 18 (b) 6 (c) 3 (d) 2

2. The simplest form of form of $\frac{6}{12}$ is ....

   (a) $\frac{1}{2}$ (b) $\frac{2}{3}$ (c) $\frac{5}{6}$ (d) $\frac{12}{6}$

3. Estimate the sum of $\frac{1}{6} + \frac{7}{8}$ using benchmarks, ...

   (a) $\frac{25}{24}$ (b) 1 (c) $\frac{1}{2}$ (d) 0

4. $\frac{2}{6}$ x 3 = ...

   (a) $\frac{5}{6}$ (b) 1 (c) 36 (d) $\frac{12}{3}$

5. $3\frac{2}{5}$ x 5 = ...

   (a) $\frac{17}{5}$ (b) 5 (c) 17 (d) $3\frac{10}{5}$

6. It is impossible to draw a triangle with two .... Angles .

   (a) Acute (b) Obtuse (c) right (d) both b and c

7. the measure of an acute angle may be .... °

   (a) 0° (b) 40° (c) 90° (d) 170°

8. $\frac{4}{11}$ x .... = $\frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{2}{11}$

   (a) $\frac{14}{11}$ (b) $3\frac{1}{2}$ (c) 4 (d) $\frac{6}{11}$

9. $\frac{8}{15}$ x b = $\frac{8}{15} + \frac{8}{15} + \frac{4}{15}$, then b = ...

   (a) $\frac{20}{15}$ (b) $3\frac{1}{2}$ (c) 3 (d) 2.5

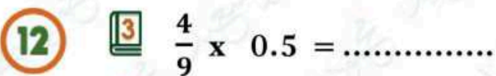
10. $7\frac{3}{4}$ hours = ... hours + ... minutes

    (a) 7 , 30 (b) 7 , $\frac{1}{2}$ (c) 7 , 15 (d) 7 , 45

11. the opposite triangle is ....

    (a) right (b) Obtuse (c) acute (d) otherwise



12) $\frac{4}{9}$ x 0.5 = ...

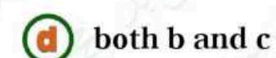
(a) $\frac{8}{9}$ (b) $\frac{20}{9}$ (c) 20 (d) $\frac{2}{9}$

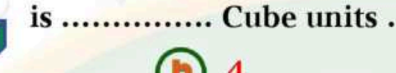
13) $\frac{8}{15}$ x 0.25 = ...

(a) $\frac{1}{4}$ (b) $\frac{25}{15}$ (c) 24 (d) $\frac{2}{15}$

14) It is impossible to draw a triangle with one .... Angles .

(a) Acute (b) Obtuse (c) right

(d) both b and c





15) Volume of [figure] is .... Cube units .

(a) 3 (b) 4 (c) 5 (d) 10

16) the solid which has 5 vertices and 8 edges is ....






(a) Cone (b) Cube (c) cuboid (d) Pyramid

17) the measure of an acute angle .... the measure of an obtuse angle




(a) < (b) > (c) = (d) otherwise



18) 8 ÷ e = 40 , then e = ...

(a) 40 (b) $\frac{9}{40}$ (c) 5 (d) $\frac{1}{5}$

19) $\frac{8}{9} + \frac{2}{6}$ is about $1\frac{1}{2}$, the estimation is ....

(a) overestimate (b) underestimate

20) $\frac{7}{9} - \frac{3}{9}$ = ...

(a) $\frac{4}{9}$ (b) $\frac{5}{0}$ (c) 1 (d) $\frac{10}{9}$

21) m (< A) = 40° , m (< B) = 70° , m (< C) = 70° , then it is a ....triangle .

(a) right (b) Obtuse (c) acute (d) otherwise

22) $3\frac{2}{6}$ x $\frac{....}{6}$ = $3\frac{2}{6}$

(a) $\frac{6}{6}$ (b) $3\frac{2}{6}$ (c) 6 (d) $\frac{1}{3}$

23) $\frac{6}{6}$ x 2 = ...

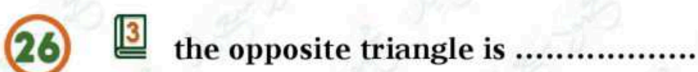
(a) $\frac{6}{6}$ (b) $2\frac{1}{6}$ (c) 2 (d) $\frac{5}{2}$

24) $3\frac{1}{2}$ hours = ... hours + ... minutes

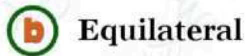
(a) 3 , 30 (b) 3 , $\frac{1}{2}$ (c) 3 (d) 4 , 2

25) $\frac{1}{5}$ ÷ 7 = ...

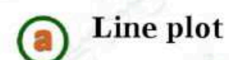
(a) 1 (b) $\frac{1}{35}$ (c) 35 (d) $\frac{5}{7}$



26 the opposite triangle is ………………

ⓐ **scalene**  ⓑ Equilateral  ⓒ isosceles  ⓓ otherwise

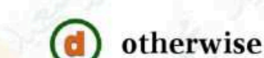
27 Data can be represented by ………………

ⓐ Line plot  ⓑ Pie graph ⓒ pictograph ⓓ **All of them**

28 ………………… Triangle has 2 acute angles and 1 right angle .

ⓐ **right**  ⓑ Obtuse ⓒ right  ⓓ otherwise

29 the measure of an obtuse angle is ……………… 90°

ⓐ $<$  ⓑ **$>$** ⓒ $=$  ⓓ otherwise 

30 the number of horizontal layer is ………………

ⓐ 3  ⓑ 4 ⓒ **5**  ⓓ 10

31 the cube has ………. Faces .

ⓐ 12  ⓑ **6** ⓒ 0 ⓓ 8 

32 18 months = …………… Year

ⓐ **$\frac{18}{12}$** ⓑ $3\frac{1}{6}$ ⓒ 3 ⓓ All of them

33 the simplest form of $4\frac{2}{10}$ is …………………

ⓐ $4\frac{3}{4}$  ⓑ **$4\frac{1}{5}$** ⓒ $\frac{42}{10}$ ⓓ $2\frac{3}{4}$

34 $\frac{25}{8}$ is equivalent to ………………

ⓐ $2\frac{1}{8}$  ⓑ $3\frac{1}{25}$ ⓒ **$3\frac{1}{8}$** ⓓ $\frac{8}{25}$

35 $3\frac{5}{6}$ is equivalent to ………………

ⓐ $2\frac{5}{6}$ ⓑ $4\frac{1}{25}$ ⓒ $3\frac{1}{6}$ ⓓ **$\frac{23}{6}$**

36 $3\frac{2}{6}$ is equivalent to ………………

ⓐ **$2\frac{8}{6}$** ⓑ $3\frac{1}{6}$ ⓒ $2\frac{2}{6}$ ⓓ $\frac{23}{6}$

37 $8\frac{8}{8}$ is equivalent to ………………

ⓐ $9\frac{5}{6}$ ⓑ $8\frac{1}{8}$ ⓒ 81 ⓓ **9**

38 $4\frac{2}{10}$ is equivalent to ……………………

ⓐ $4\frac{20}{100}$ ⓑ $4\frac{1}{5}$ ⓒ $\frac{42}{10}$ ⓓ **All of them**




39. m (< A) = 90° , m (< B) = 60° , m (< C) = 30° , then it is a ....triangle .

a) right b) Obtuse c) acute d) otherwise

40. $8\frac{1}{6} + 3\frac{1}{5} = 9 + 3\frac{1}{5}$ - ....

a) $12\frac{1}{5}$ b) $4\frac{1}{5}$ c) $\frac{5}{6}$ d) $\frac{1}{6}$

41. the volume of this solid is .... Cube units .

a) 12 b) 3 c) 2 d) 9

42. .... Triangle has 2 acute angles and 1 obtuse angle .

a) right b) Obtuse c) right d) otherwise

43. the measure of a right angle is .... °

a) 0° b) 40° c) 90° d) 180°

44. $\frac{4}{6}$ x $\frac{4}{9}$ x $\frac{3}{16}$ = ...

a) $\frac{124}{186}$ b) $2\frac{2}{16}$ c) 3 d) $\frac{1}{18}$

45. $\frac{1}{2}$ x $\frac{2}{3}$ x $\frac{3}{4}$ x .... = $\frac{1}{4}$

a) 4 b) 2 c) 3 d) 1

46. $8\frac{1}{6} + 3\frac{1}{5} = 9 + 3 + \frac{1}{5}$ - ....

a) $12\frac{1}{5}$ b) $4\frac{1}{5}$ c) $\frac{5}{6}$ d) $\frac{1}{6}$

47. $\frac{8}{7}$ x 3 = 4 x $\frac{.....}{7}$

a) 8 b) 4 c) 3 d) 6

48. $\frac{16}{9}$ x $\frac{3}{4}$ .... $\frac{2}{6}$ x $\frac{3}{8}$

a) < b) > c) = d) otherwise

49. m (< G) = 110°, m (< D) = 35°, m (< F) = 35°, then it is an ....triangle

a) right b) Obtuse c) acute d) otherwise

50. $4\frac{2}{3} + 3\frac{9}{10}$ is estimated as ....

a) $4\frac{1}{2} + 4$ b) $1 + \frac{1}{2}$ c) $4 + \frac{1}{2}$ d) $31 + 4\frac{1}{2}$

51. Length x width x height = ...

a) Area b) Perimeter c) volume d) Base area

52. $m - \frac{5}{7} = \frac{1}{4}$, then the value of m is ....

a) $\frac{27}{28}$ b) $\frac{13}{28}$ c) $\frac{1}{4}$ d) $\frac{5}{7}$

53. $\frac{7}{14} + e = 1$, then the value of e is ....

a) $\frac{8}{14}$ b) $\frac{1}{2}$ c) $\frac{5}{14}$ d) $\frac{5}{7}$

54. $\frac{11}{16} - a = \frac{1}{4}$, then the value of a is ....

a) $\frac{8}{16}$ b) $\frac{7}{16}$ c) $\frac{10}{12}$ d) $\frac{6}{6}$

55. $\frac{12}{20}$ is equivalent to ....

a) $\frac{8}{10}$ b) $\frac{3}{5}$ c) $\frac{10}{12}$ d) $\frac{6}{5}$

56. $4\frac{1}{12}$ years = ... years + ... months

a) 4 , 2 b) 4 , $\frac{1}{12}$ c) 4 , 1 d) 4 , 12

57. .... Triangle has 3 acute angles and 0 obtuse angle .

a) right b) Obtuse c) acute d) otherwise

58. the measure of an obtuse angle may be .... °

a) 0° b) 40° c) 90° d) 110°

59. $\frac{3}{4} - \frac{3}{8}$ .... $\frac{7}{25} \times \frac{5}{21}$

a) < b) > c) = d) otherwise

60. $2\frac{2}{6} \times \frac{3}{7}$ = ...

a) $\frac{14}{21}$ b) $3\frac{1}{2}$ c) 1 d) $\frac{14}{6}$

61. AB = BC = 6.32 cm , AC is less than them , then it is an ....triangle .

a) scalene b) Equilateral c) isosceles d) otherwise

62. the volume of this solid is .... Cubes.

a) 3 b) 4 c) 5 d) 10

63. the sum of the measures of angles around at a point is equal ....°

a) 270 b) 90 c) 360 d) 180

64. $5\frac{2}{8} + 3\frac{6}{8}$ = ...

a) 9 b) $8\frac{1}{6}$ c) $8\frac{4}{6}$ d) $\frac{4}{6}$

65) $6\frac{1}{5} - 2\frac{3}{5} = \dots\dots$



(a) $4\frac{4}{5}$ (b) $4\frac{2}{5}$ (c) $3\frac{3}{5}$ (d) $\frac{31}{5}$

66) $3\frac{1}{8} + 2\frac{3}{8} = \dots\dots$

(a) $5\frac{4}{5}$ (b) $5\frac{1}{2}$ (c) $1\frac{4}{8}$ (d) $1\frac{2}{8}$



67) $9\frac{3}{9} - 3\frac{1}{3} = \dots\dots$

(a) $6\frac{2}{3}$ (b) $6\frac{7}{9}$ (c) $6\frac{1}{9}$ (d) 6



68) $3\frac{2}{3} \times \frac{1}{5} = \frac{1}{5} \times 3 + \frac{1}{5} \times \dots\dots$

(a) $\frac{2}{3}$ (b) $3\frac{2}{3}$ (c) 3 (d) $\frac{8}{3}$



69) 45 minutes = ... Hours

(a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) 1 (d) $\frac{3}{4}$

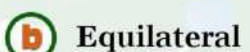
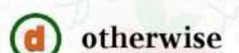


70) base area x height = ...

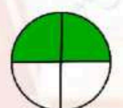
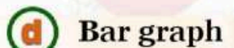
(a) Area (b) Perimeter (c) volume  (d) Base area 



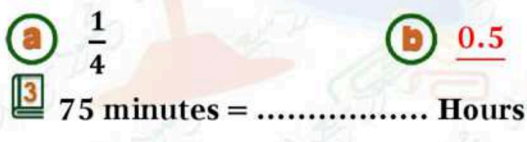
71) .... Triangle has 3 different sides .

(a) scalene (b) Equilateral  (c) isosceles  (d) otherwise 

72) A ....is bounded by an arc and two radii .

(a) Height  (b) Pie graph (c) sector   (d) Bar graph 

73) the colored part represent .... Of the circle .



(a) $\frac{1}{4}$ (b) 0.5  (c) $\frac{3}{4}$ (d) 0.25

74) 75 minutes = ... Hours

(a) $\frac{1}{2}$ (b) $1\frac{1}{4}$ (c) 1 (d) $\frac{3}{4}$

75) Which is equal to $6 \times \frac{3}{9}$

(a) 2  (b) $3 \times \frac{6}{9}$  (c) $18 \times \frac{1}{9}$ (d) all of them

76) $5 + \frac{3}{5} + \frac{2}{5} = \dots\dots$

(a) $5\frac{2}{5}$ (b) 6 (c) $\frac{18}{4}$ (d) 4

77. $\frac{2}{3} + \frac{7}{12} = 1 + \ldots\ldots$
   - a) $\frac{2}{5}$
   - b) $\frac{1}{4}$
   - c) $\frac{1}{3}$
   - d) $\frac{1}{5}$

78. $\frac{1}{4} + \frac{3}{12} = 1 - \ldots\ldots$
   - a) $\frac{1}{2}$
   - b) $\frac{1}{4}$
   - c) $\frac{1}{3}$
   - d) $\frac{1}{5}$

79. $3\frac{3}{4} = \ldots\ldots \div 4$
   - a) 12
   - b) 4
   - c) 3
   - d) 15

80. $\ldots\ldots = 13 \div 5$
   - a) 2
   - b) 5
   - c) $2\frac{3}{5}$
   - d) 18

81. $\frac{1}{2}$ year = ... Months
   - a) 5
   - b) 6
   - c) 2
   - d) 1

82. $8\frac{1}{9} + 3\frac{5}{12}$ is estimated as ....
   - a) $8\frac{1}{2} + 3$
   - b) $8 + 3\frac{1}{2}$
   - c) $0 + \frac{1}{2}$
   - d) $8\frac{1}{2} + 3.5$

83. $8\frac{1}{6} + 3.5 = \ldots\ldots$
   - a) $11\frac{2}{3}$
   - b) $11\frac{1}{6}$
   - c) $4\frac{2}{3}$
   - d) 5

84. volume ÷ height = ...
   - a) Height
   - b) Width
   - c) volume
   - d) Base area

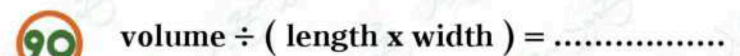
85. .... Triangle has 2 same sides and 1 different .
   - a) scalene
   - b) Equilateral
   - c) isosceles
   - d) otherwise

86. $4\frac{3}{7} + \ldots\ldots = 5\frac{1}{3}$
   - a) $9\frac{4}{21}$
   - b) $1\frac{16}{21}$
   - c) 1
   - d) $\frac{19}{21}$

87. $m - 7\frac{2}{12} = 3\frac{1}{4}$, then the value of m is ....
   - a) $10\frac{5}{12}$
   - b) $3\frac{11}{12}$
   - c) 4
   - d) $4\frac{1}{8}$

88. $a + 6\frac{4}{12} = 9\frac{3}{4}$, then the value of a is ....
   - a) $3\frac{5}{12}$
   - b) $15\frac{7}{12}$
   - c) 2.5
   - d) $16\frac{1}{12}$

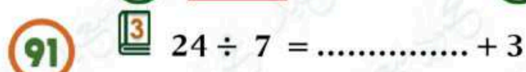
89. $5\frac{1}{5} - e = 3\frac{1}{5}$, then the value of e is ....
   - a) $2\frac{2}{5}$
   - b) $1\frac{3}{5}$
   - c) $1\frac{4}{5}$
   - d) $8\frac{4}{5}$



90 volume ÷ (length x width) = ...



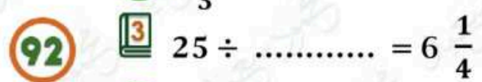
(a) Height (b) Width (c) volume (d) Base area



91 $24 \div 7 = ... + 3$



(a) $\frac{3}{3}$ (b) $\frac{1}{8}$ (c) 3 (d) $\frac{3}{7}$



92 $25 \div .... = 6\frac{1}{4}$



(a) 6 (b) $\frac{1}{4}$ (c) 4 (d) $\frac{6}{25}$

93 $\frac{2}{3} + \frac{7}{12}$ is estimated as ....

(a) $\frac{1}{2}+\frac{1}{2}$ (b) $\frac{1}{2}+1$ (c) $0+\frac{1}{2}$ (d) $1+1$

94 $\frac{8}{9} + \frac{1}{100}$ is estimated as ....

(a) $\frac{1}{2}+\frac{1}{2}$ (b) $\frac{1}{2}+1$ (c) $0+\frac{1}{2}$ (d) $1+0$

95 $2 - \frac{2}{5} - \frac{1}{5} = ...$

(a) $1\frac{2}{5}$ (b) $\frac{2}{5}$ (c) $\frac{2}{3}$ (d) 1

96 $7\frac{m}{10}$ is slightly greater than $7\frac{1}{2}$, then m can be ....



(a) 11 (b) 5 (c) 6 (d) 1

97 volume ÷ (length x height) = ...



(a) Height (b) Width (c) volume (d) Base area

98 the measure of this central angle is ....°







(a) 360 (b) 270 (c) 90 (d) 180

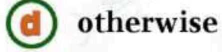
99 $\frac{1}{8} + \frac{6}{5}$ is about 1 , the estimation is ....

(a) overestimate (b) underestimate

100 the measure of an obtuse angle .... the measure of a right angle







(a) < (b) > (c) = (d) otherwise

101 $\frac{1}{6}$ year = ... Months



(a) 5 (b) 6 (c) 2 (d) 1

102 the angle whose vertex is the center of the circle is called ....angle .



(a) Centeral (b) Circular (c) right (d) Straight

103 $\frac{2}{8} + \frac{6}{8} = ...$

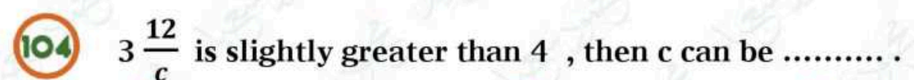








(a) $\frac{4}{6}$ (b) $\frac{2}{3}$ (c) 1 (d) $\frac{6}{8}$



104 $3\frac{12}{c}$ is slightly greater than 4 , then c can be ....



(a) 11 (b) 9 (c) 13 (d) 12

105 If the volume of a cuboid = 30 cm3 and base area = 15 cm2 , then it's height is .... Cm

(a) 5 (b) 2 (c) 15 (d) 150

106 $4 \div \frac{1}{4}$ .... $\frac{1}{4} \div 4$

(a) < (b) > (c) = (d) otherwise

107 $\frac{1}{5}$ hour = ... Minutes

12 (b) 7 (c) 5 (d) 1

108 $\frac{5}{9} + \frac{4}{7}$ is about 1 , the estimation is ....

(a) overestimate (b) underestimate

109 $\frac{1}{...?...} = \frac{8}{24}$

(a) 0 (b) 2 (c) 3 (d) 1

110 $\frac{1}{4} + \frac{3}{16}$ = ...

(a) $\frac{7}{16}$ (b) 0 (c) 16 (d) $\frac{4}{20}$

111 $1\frac{1}{8}$ day = ... hours

(a) 24 (b) 8 (c) 27 (d) 2

112 .... $\div \frac{1}{6}$ = 24

(a) 4 (b) $\frac{1}{4}$ (c) 36 (d) $\frac{6}{24}$

113 $\frac{1}{8} \div m = \frac{1}{32}$, then m= ....

(a) 4 (b) $\frac{1}{4}$ (c) 32 (d) $\frac{8}{32}$

114 A ....is a circle divided into sectors .

(a) Height (b) Pie graph (c) sector (d) Bar graph

115 the measure of an acute angle .... the measure of a right angle

(a) < (b) > (c) = (d) otherwise

116 Estimate the difference of $\frac{9}{11} - \frac{2}{5}$ using benchmarks, ...

(a) $\frac{7}{6}$ (b) $\frac{1}{2}$ (c) 0 (d) 1

117 The LCM of denominators of $\frac{4}{7}$ and $\frac{2}{5}$ is ....

a) 7 b) 35 c) 5 d) $\frac{6}{35}$

118 90 minutes = ... hours

a) $12\frac{1}{2}$ b) $3\frac{1}{2}$ c) 30 d) $1\frac{1}{2}$

119 $\frac{1}{4} \div \frac{1}{2}$ = ...

a) 4 b) $\frac{1}{4}$ c) 8 d) $\frac{1}{2}$

120 $10 \div \frac{1}{5}$ = ...

a) 2 b) $\frac{1}{5}$ c) 50 d) $\frac{5}{10}$

121 $1 - \frac{3}{5} - \frac{2}{5}$ = ...

a) 0 b) 2 c) $\frac{5}{5}$ d) 1

122 $\frac{2}{5} = \frac{.....}{15}$

a) 0 b) 2 c) 3 d) 6

123 $\frac{1}{...?...} = \frac{12}{24}$

a) 0 b) 2 c) 3 d) 1

124 $8 \div \frac{1}{4}$ .... $4 \div \frac{1}{8}$

a) < b) > c) = d) otherwise

125 $\frac{1}{5} + \frac{2}{3}$ = ...

a) $\frac{13}{15}$ b) $\frac{3}{8}$ c) 0 d) $\frac{1}{2}$

126 ....+ $\frac{5}{8}$ = 1

a) $\frac{4}{8}$ b) $\frac{3}{8}$ c) 0 d) $\frac{1}{2}$

127 .... + $\frac{5}{10}$ = 1

a) $\frac{1}{2}$ b) $\frac{5}{10}$ c) $\frac{4}{8}$ d) all of them

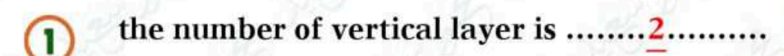
128 1 - .... = 0

a) $\frac{1}{2}$ b) $\frac{10}{10}$ c) $\frac{2}{3}$ d) 0

129 1 - .... = 1

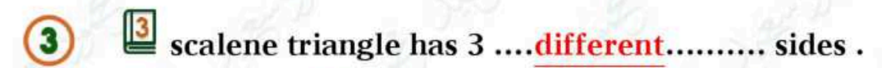
a) $\frac{1}{2}$ b) $\frac{10}{10}$ c) $\frac{0}{3}$ d) 1

Question 02 complete

1.  the number of vertical layer is ....2..........



2. $\frac{3}{12} \times \frac{3}{8} \times \frac{2}{6} =$ ....$\frac{1}{32}$..........

3.  scalene triangle has 3 ....different.......... sides .

4. $4\frac{4}{8} \times \frac{...8...}{8} = 4\frac{1}{2}$

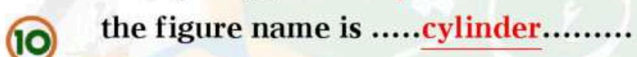
5. $\frac{2}{8} \times 3 \times \frac{2}{6} =$ ....$\frac{1}{4}$.........

6. $\frac{100}{100} \times 5\frac{6}{12} =$ ....$5\frac{6}{12}$...........

7. $3\frac{2}{5} \times 5 = 5 \times$ ......$\frac{17}{5}$........

8. $\frac{2}{5} \times 3 = 6 \times$ .....$\frac{1}{5}$........

9. $\frac{3}{2} \times \frac{12}{24} =$ ......$\frac{3}{4}$.........

10.  the figure name is .....cylinder.........

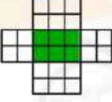


11. $\frac{2}{11} \times$ .....$\frac{3}{2}$...... $= \frac{3}{11}$

12. ......$\frac{6}{2}$...... $\times \frac{3}{8} \times \frac{2}{6} = \frac{3}{8}$

13. $\frac{2}{3} \times$ ......$\frac{3}{4}$..... $= \frac{6}{12}$

14. Volume = ...3.....x...2.....x....2.....

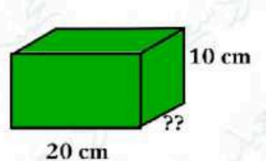


15. .....$\frac{2}{4}$...... $\times \frac{5}{6} = \frac{10}{24}$

16. ....acute.............. Triangle has 3 acute angles and 0 right angle .

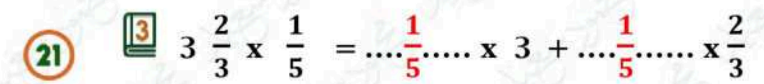
17. $\frac{3}{5} \times 1.5 \times 30 =$ .....27.........

18. if the volume = 1200 cm3 , then the missing dimension is ....6......cm



19. $\frac{4}{11} \times$ ......3.5..... $= \frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{2}{11}$

20. $3\frac{3}{5} \times$ ......$\frac{5}{18}$....... $= 1$



21. $3\frac{2}{3} \times \frac{1}{5} = \ldots\frac{1}{5}\ldots \times 3 + \ldots\frac{1}{5}\ldots \times \frac{2}{3}$

22. 15 minutes = ...$\frac{1}{4}$........ Hours

23. ......30........ minutes = $\frac{1}{2}$ Hours

24. $2 \div 4 = \ldots\ldots\frac{2}{4}\ldots\ldots$

25. $23 \div 4 = \ldots\ldots 5\frac{3}{4}\ldots\ldots$

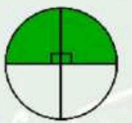
26. $34 \div 5 = 6 + \ldots\frac{4}{5}\ldots$

27. $40 \div \ldots 9 \ldots = 4\frac{4}{9}$

28. $18 \div \frac{1}{2} = 18 \times \ldots 2 \ldots$



29. the measure of this central angle is ......180......°



30. $\frac{4}{11} \times \ldots 4 \ldots = \frac{4}{11} + \frac{4}{11} + \frac{4}{11} + \frac{4}{11}$

31. $d \div \frac{1}{5} = \frac{1}{2}$, then d = ...$\frac{1}{10}$........

32. $\frac{1}{7} \div n = \frac{1}{21}$, then n = ...3........

33. $6 \div f = 24$, then f = ...$\frac{1}{4}$........

34. Any triangle has at least ....2........ Acute angles .

35. Volume of [figure] is ....4........ Cube units .

36. ....acute.............. Triangle has 3 acute angles .

37. $\frac{1}{6} + \frac{3}{6} = \ldots\frac{2}{3}\ldots$ In simplest form

38. color $\frac{1}{4}$ of the circle .

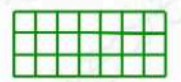
39. the measure of a right angle is ......equal............ 90°

40. the sum of all decimals in one circle = ...1.....

41. the measure of an obtuse angle is ......more than............ 90°

42. the triangle has .....3....sides and .....3.....angles

43. The simplest form of form of $\frac{2}{24}$ is ...... $\frac{1}{12}$.......

44. the Area of the opposite figure is ...21... square units 

45. the sphere has ......0.... vertex .

46. the measure of an acute angle is .....less than............. 90°

47. $\frac{2}{6}$ x 2.5 = ...$\frac{5}{6}$........

48. ......face.............is a flat surface of a solid figure .

49. $\frac{5}{8}$ x 0.4 = ...$\frac{1}{4}$........

50. ......equilateral....... Triangle has 3 equal sides .

51. volume ÷ base area = ...height......

52. volume ÷ (width x height) = ...length..........

53. $\frac{2}{3}$ year = ...8........ Months

54. If the volume of a cuboid = 400 cm3, it's length = 10 cm , it's height = 5 cm, then it's width is ....8....... Cm

55. A ....circular sector........is a part of a circular region .

56. the colored part represent ......$\frac{3}{4}$...... Of the circle

57. Color $\frac{1}{2}$ of the circle . 

58. $30 \div \frac{1}{3}$ = ...90...........

59. ......5...... $\div \frac{1}{5}$ = 25

60. the sum of all fractions in one circle = ...1.....

61. $7\frac{8}{8}$ is equivalent to ....8.........

62. 90 seconds = ...$1\frac{1}{2}$...... minutes

63. The smallest same denominator of $\frac{1}{4}$ and $\frac{3}{8}$ is ....8.........

64. $\frac{1}{...4....} = \frac{2}{8}$

65. Estimate the sum of $\frac{1}{6} + \frac{6}{7}$ using benchmarks, ...1............

66. The LCM of denominators of $\frac{4}{5}$ and $\frac{2}{25}$ is ....25..........

67. $\frac{6}{9} - \frac{3}{9} = \ldots\ldots \frac{1}{3} \ldots\ldots$ In simplest form

68. $\ldots \frac{7}{9} \ldots + \frac{2}{9} = 1$

69. ABC is an equilateral triangle where AB = 4 cm , then AC = ..4..And BC = ..4..

70. $3 + \frac{1}{8} + \frac{7}{8} = \ldots\ldots 4 \ldots\ldots$

71. $R - \frac{2}{6} = \frac{1}{3}$, then the value of R is ... $\frac{2}{3}$.....

72. $\frac{1}{4} + \frac{3}{4} = 1 - \ldots\ldots 0 \ldots\ldots$

73. $\frac{1}{12}$ year = ...1........ Months

74. $2\frac{1}{4}$ hours = ...2...... hours + ...15........ minutes

75. 24 months = ...2........ Year

76. 120 seconds = ...2.......... minutes

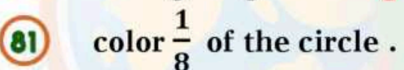
77. $\frac{3}{2} \times 2 = \ldots\ldots 3 \ldots\ldots$

78. $2\frac{2}{5} \times 3 = \ldots\ldots 7\frac{1}{5} \ldots\ldots$

79. $\frac{8}{9} \times 0.125 = \ldots\ldots \frac{1}{9} \ldots\ldots$

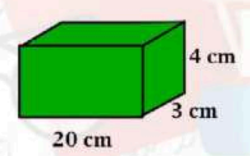
80. $1 - \frac{3}{8} - \frac{2}{8} = \ldots\ldots \frac{3}{8} \ldots\ldots$

81. color $\frac{1}{8}$ of the circle .



Answer the following

1. find the volume of this solid .



V = L x W x H ,,, V = 20 x 3 x 4 = 240 cm^3

2. Mohamed bought a book by $\frac{1}{3}$ of his money and a candy by $\frac{2}{7}$ of his money and saved the left money . What fraction of money does Mohamed save ?

$\frac{1}{3} + \frac{2}{7} = \frac{13}{21}$ ---- $1 - \frac{13}{21} = \frac{8}{21}$ of his money

3. Yara's garden consists of $\frac{3}{8}$ poppies , $\frac{1}{4}$ roses and flowers in the rest of the garden what fraction of the flowers in the garden ?

$\frac{3}{8} + \frac{1}{4} = \frac{5}{8}$ --- $1 - \frac{5}{8} = \frac{3}{8}$

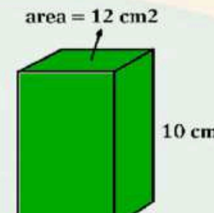
4 Besan collected $6\frac{2}{7}$ of honey . She gave his sister Sandy $3\frac{3}{4}$ kg of them . How many kilograms are left ?

$6\frac{2}{7} - 3\frac{3}{4} = 2\frac{15}{28}$

5 Yousef spent $\frac{5}{6}$ of his money for buying candy and $\frac{3}{4}$ for buying clothes . Write their fractions with like denominators .

$\frac{10}{12}$, $\frac{9}{12}$

6 find the volume of this solid .



V = B.A x H ,,,, $V = 12 \times 10 = 120\ cm^3$

7 Lena ate $1\frac{3}{4}$ kg of fruits , Yasin ate $\frac{1}{5}$ kg more than Lena and Jana ate $\frac{3}{10}$ kg less than Yasin . How many kilograms did Jana eat ?

yasin = $1\frac{3}{4} + \frac{1}{5} = 1\frac{19}{20}$ kg

Jana = $1\frac{19}{20} - \frac{3}{10} = 1\frac{13}{20}$ kg

8 Seif studied MATH for $3\frac{1}{4}$ hours and science for 30 minutes . How many hours did Seif study in all ?

$3\frac{1}{4} + \frac{1}{2} = 3\frac{3}{4}$ hours

9 Esraa notice that $\frac{1}{3}$ of the 9 rose bushes are in bloom . How many rose bushes are in bloom ?

3

$\frac{1}{3} \times 9 = 3$ rose bushes

10 Maya ate $\frac{1}{4}$ of 24 candies . How many candies are left ?

3

$\frac{3}{4} \times 24 = 18$ candies

11 write three different multiplication expressions that have the same product as $5 \times \frac{4}{8}$

3

$4 \times \frac{5}{8}$, $\frac{4}{8} \times 5$, $20 \times \frac{1}{8}$

12 Dareen bought $3\frac{1}{8}$ liters of water for $\frac{4}{5}$ for each liter . How much money did Dareen pay ?

3

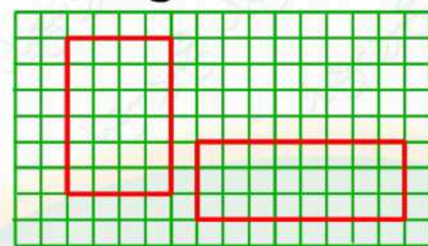
$\frac{4}{5} \times 3\frac{1}{8} = 2.5$ LE

13 Mohamed bought 3 bags of meat . Each bag has a mass of $2\frac{1}{9}$ kg . If he gave $4\frac{2}{3}$ kg to Rozana . How many kilograms left ?



$3 \times 2\frac{1}{9} = 6\frac{1}{3}$ kg → $6\frac{1}{3} - 4\frac{2}{3} = 1\frac{2}{3}$ kg

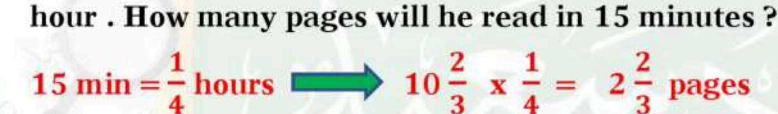
14 **Draw two different rectangles with an area 24 square units .**



15 A rectangular room of $1\frac{1}{4}$ m wide and 4 m longe . Find the area .

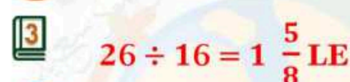
$4 \times 1\frac{1}{4} = 5$ square meter

16 Mr Mahmoud Elkholy is reading achapter book in MATH . He can read $10\frac{2}{3}$ pages in 1 hour . How many pages will he read in 15 minutes ?



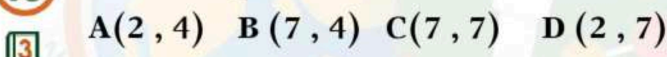
15 min = $\frac{1}{4}$ hours → $10\frac{2}{3} \times \frac{1}{4} = 2\frac{2}{3}$ pages

17 If the price of 16 candies 26 L.E. .find the price of each one .



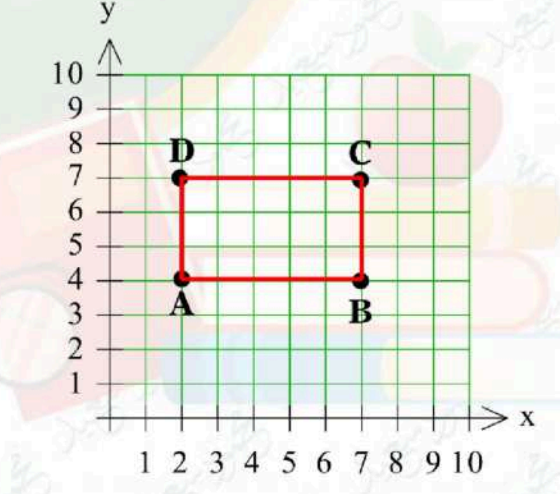
$26 \div 16 = 1\frac{5}{8}$ LE

18 **Plot the points on the coordinate plane :**



A(2 , 4) B (7 , 4) C(7 , 7) D (2 , 7)

- what is the name of the figure ABCD ? Rectangle
- what is the length of AB ? 5
- what is the length of BC ? 3
- CD // ....BA......
- AB is perpendicular to .....BC.....



19 How many $\frac{1}{6}$ cup in 6 cups of chocolate ?

$6 \div \frac{1}{6} = 36$ cups

20 Mr Mahmoud Elkholy wants to give $\frac{1}{5}$ of a box candies to each student he has 9 boxes . To how many students will he be able to give candies ?

$9 \div \frac{1}{5} = 45$ students

21 **Find the area of the opposite rectangle .**

8 cm

$3\frac{1}{2}$ cm

$8 \times 3\frac{1}{2} = 28$ square cm

22 Sofian wants to design a cuboid room of volume 12000000 cm3 , it's length = 300 cm and it's height = 200 cm, find it's width .

W = V ÷ (L x H) ,,, W = 12000000 ÷ (300x 200) = 200 cm

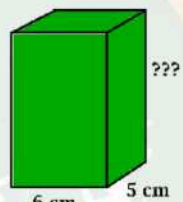
23 A cuboid with a square base it's length 20 cm . 24000 cm3 oil was poured into it . What is the height of the oil ?

H = V ÷ (L x W) ,,, H = 24000 ÷ (20 x 20) = 60 cm

24 MR Mahmoud Elkholy walked $1\frac{1}{2}$ km and his student Ebrahim walked $2\frac{3}{5}$ km more . What distance that Ebrahim walked ?

$1\frac{1}{2} + 2\frac{3}{5} = 4\frac{1}{10}$ km

25 if the volume = 300 cm3 , find the height of this solid .



H = V ÷ (L x W) ,,, H = 300 ÷ (6 x 5) = 10 cm

26 Samira studied MATH for $1\frac{1}{2}$ hours and scince for 40 minutes . How many minutes did Samira study in all ?

$1\frac{1}{2}$ x 60 = 90 min \\ 90 + 40 = 130 min

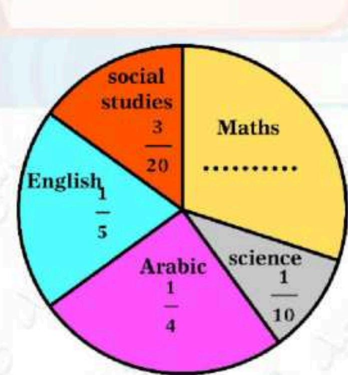
27 Answer with the number line .

- what is the value of A ? 2
- what is the value of B ? 5
- what is the value of C ? 8
- what is the distance between A and C ? 6



28 *The opposite figure shows the fraction of time that Eyad spends in studying subjects . He studied 20 hours .*

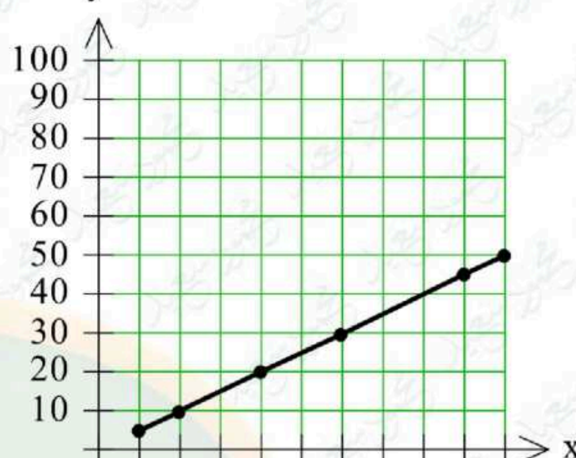
- what's the decimal of the time that Eyad spends in studying Maths ? 0.3
- what's the fraction of the time that Eyad spends in studying Maths ? $\frac{3}{10}$
- what's the measure of the central angle of science ? 36 °
- what's the measure of the central angle of Arabic ? 90 °
- How many hours did he study English ? 4 HOURS
- How many hours did he study Arabic ? 5 HOURS
- How many hours did he study science ? 2 HOURS





29 Ahmed's car consumes 1 Liter of petrol to cover 5 km , complete the table and graph the points on the grid .

Petrol	Distance
1	5
2	10
4	20
6	30
9	45
10	50



- How many liters are needed to cover 40 km ? 8 L
- 12 liters can be consumed to cover .....60...... Km

30 Represent these data by the opposite pie chart .

Rate	excellent	good	pass	weak
Fraction	$\frac{3}{20}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{10}$

- If the total number of students is 100 students ,

1- find the number of good students . 50 students

2- find the number of pass students . 25 students

3- find the number of week students . 10 students

4- find the number of excellent students . 15 students



31 In the opposite circle . This represents 80 students .

- Shade $\frac{1}{2}$ of the circle green .
- Shade $\frac{1}{8}$ of the circle red .
- Shade $\frac{1}{4}$ of the circle blue .
- Shade $\frac{1}{8}$ of the circle yellow .
- what decimal of the group is blue ? 0.25
- what decimal of the group is green ? 0.5
- what decimal of the group is red ? 0.125
- How many students do the green represent ? $\frac{1}{2}$ X 80 = 40 students
- How many students do the blue represent ? $\frac{1}{4}$ X 80 = 20 students
- How many students do the yellow and red represent ? $\frac{1}{4}$ X 80 = 20 students

تم بحمد الله ،

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم

Equivalent fractions and The simplest form (Simplify)

Choose

1. 
The mixed number $1\frac{2}{3}$ = _______ as an improper fraction
A. $\frac{3}{2}$ **B.** $\frac{2}{3}$ **C.** $\frac{5}{3}$ **D.** $\frac{5}{2}$

2. 
The mixed number $7\frac{4}{5}$ = _______ as an improper fraction
A. $\frac{39}{5}$ **B.** $\frac{39}{4}$ **C.** $\frac{35}{5}$ **D.** $\frac{28}{5}$

3. $2\frac{1}{5}$ = _______ as an improper fraction
A. $\frac{2}{5}$ **B.** $\frac{5}{2}$ **C.** $\frac{11}{2}$ **D.** $\frac{11}{5}$

4. The improper fraction $\frac{7}{2}$ = _______
A. $3\frac{1}{2}$ **B.** $7\frac{2}{5}$ **C.** $2\frac{5}{7}$ **D.** $2\frac{2}{5}$

5. The improper fraction $\frac{19}{5}$ = _______
A. $4\frac{3}{5}$ **B.** $1\frac{9}{5}$ **C.** $3\frac{4}{5}$ **D.** $3\frac{1}{5}$

6. $\frac{27}{7}$ = _______ as a mixed number
A. $7\frac{2}{3}$ **B.** $3\frac{6}{7}$ **C.** $2\frac{3}{7}$ **D.** $3\frac{3}{5}$

7. $\frac{49}{8}$ = _______ as a mixed number
A. $8\frac{1}{6}$ **B.** $1\frac{5}{8}$ **C.** $1\frac{6}{8}$ **D.** $6\frac{1}{8}$

8. $\frac{100}{9}$ = _______ as a mixed number
A. $9\frac{1}{11}$ **B.** $11\frac{1}{9}$ **C.** $11\frac{3}{9}$ **D.** $9\frac{9}{10}$

9. $2\frac{5}{9}$ is equivalent to _______
A. $\frac{17}{9}$ **B.** $\frac{23}{9}$ **C.** $\frac{17}{9}$ **D.** $\frac{10}{9}$

10. $3\frac{2}{5}$ is equivalent to _______
A. $\frac{17}{2}$ **B.** $\frac{17}{5}$ **C.** $\frac{3}{5}$ **D.** $\frac{15}{2}$

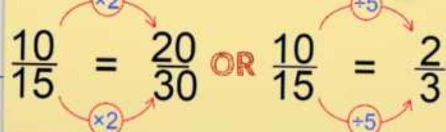
11. Which of the following is equivalent to $\frac{5}{6}$?
A. $\frac{15}{16}$ B. $\frac{10}{8}$ C. $1\frac{1}{5}$ D. $\frac{20}{24}$

12. $\frac{19}{5}$ is equivalent to _______
A. $3\frac{3}{5}$ **B.** $4\frac{1}{5}$ **C.** $3\frac{5}{5}$ **D.** $3\frac{4}{5}$

13. $\frac{17}{3}$ is equivalent to _______
A. $3\frac{1}{6}$ **B.** $7\frac{1}{2}$ **C.** $3\frac{2}{5}$ **D.** $5\frac{2}{3}$

14. The fraction $\frac{3}{4}$ is equivalent to _______
A. $\frac{9}{16}$ B. $\frac{9}{12}$ C. $\frac{4}{3}$ D. $1\frac{1}{3}$

Equivalent fractions
using multiply or Divide



$\frac{10}{15} = \frac{20}{30}$ OR $\frac{10}{15} = \frac{2}{3}$

improper ⇒ Mixed

$\frac{25}{6} \Rightarrow 4\frac{1}{6}$ (24, Remainder)

Mixed ⇒ improper

$2\frac{3}{8} \Rightarrow \frac{19}{8}$

15 Which of the following is not equivalent to $\frac{6}{8}$?

A. $\frac{3}{4}$ B. $\frac{60}{80}$ C. $\frac{12}{18}$ D. $\frac{30}{40}$

16 The fraction $\frac{2}{4}$ is equivalent to ______

A. $\frac{12}{14}$ B. $\frac{6}{12}$ C. $\frac{6}{7}$ D. $\frac{20}{45}$

17 The fraction $\frac{10}{15}$ is equivalent to ______

A. $\frac{4}{6}$ B. $\frac{2}{5}$ C. $1\frac{1}{2}$ D. $\frac{20}{33}$

18 The equivalent fraction of $\frac{3}{6}$ is ______

A. $\frac{3}{5}$ B. $\frac{2}{6}$ C. $\frac{15}{30}$ D. $\frac{2}{5}$

19 If $\frac{5}{8} = \frac{x}{40}$, then $x =$ ______

A. 37 B. 25 C. 40 D. 5×8

20 $\frac{25}{4}$ is equivalent to ______

A. $2\frac{5}{4}$ B. $5\frac{2}{4}$ C. $6 + \frac{1}{4}$ D. $4 + \frac{1}{6}$

21 The simplest form of $\frac{36}{48}$ is ______

A. $\frac{6}{8}$ B. $\frac{3}{2}$ C. $\frac{2}{3}$ D. $\frac{3}{4}$

Fraction in simplest form

$\frac{12}{32} = \frac{3}{8}$ (÷4, ÷4)

22 The simplest form of the fraction $\frac{20}{45}$ is ______

A. $\frac{4}{9}$ B. $\frac{5}{9}$ C. $\frac{10}{9}$ D. $\frac{1}{5}$

23 The simplest form of the fraction $\frac{7}{21}$ is ______

A. $\frac{1}{7}$ B. $\frac{3}{7}$ C. $\frac{4}{7}$ D. $\frac{1}{3}$





24 The simplest form of $3\frac{4}{6}$ is ______

A. $3\frac{2}{6}$ B. $\frac{22}{6}$ C. $\frac{2}{3}$ D. $3\frac{2}{3}$

25 Which of the following is correct?

A. $\frac{3}{2} = \frac{4}{6}$ B. $\frac{7}{8} = \frac{5}{6}$ C. $\frac{7}{14} = \frac{1}{2}$ D. $\frac{3}{2} = \frac{9}{5}$

26 The simplest form of $\frac{12}{18}$ is ______

A. $\frac{2}{8}$ B. $\frac{2}{3}$ C. $\frac{18}{12}$ D. 1

27 $\frac{5}{15}$ ______ $\frac{1}{3}$

A. $>$ B. $<$ C. $=$

Complete :	
28	$8\frac{1}{5}$ = _______ as an improper fraction
29	$3\frac{2}{11}$ = _______ as an improper fraction
30	$\frac{9}{5}$ = _______ as a mixed number
31	If $\frac{24}{36} = \frac{2}{k}$, then k = _______
32	If $\frac{5}{7} = \frac{X}{28}$, then X = _______
33	The simplest form of $\frac{12}{18}$ is _______
34	If $\frac{3}{4} = \frac{a}{16}$, then a = _______

Regrouping The whole number

Choose				
35	1 = _______			
	A. $\frac{1}{5}$	**B.** $\frac{3}{3}$	**C.** $1\frac{3}{3}$	**D.** 2
36	4 = _______			
	A. $3\frac{6}{6}$	**B.** $\frac{3}{4}$	**C.** 3	**D.** $4\frac{1}{3}$
37	7 = _______			
	A. $7\frac{3}{5}$	**B.** $\frac{14}{3}$	**C.** $6\frac{10}{10}$	**D.** $7\frac{5}{5}$
38	11 = _______			
	A. $11\frac{7}{7}$	**B.** $\frac{1}{11}$	**C.** $11\frac{1}{2}$	**D.** $10\frac{2}{2}$
39	5 = _______			
	A. $5\frac{2}{2}$	**B.** $4\frac{5}{5}$	**C.** $5\frac{1}{3}$	**D.** $4\frac{3}{5}$
40	6 = _______			
	A. $5 + \frac{2}{2}$	**B.** $6\frac{5}{5}$	**C.** $6\frac{1}{2}$	**D.** $5\frac{1}{6}$

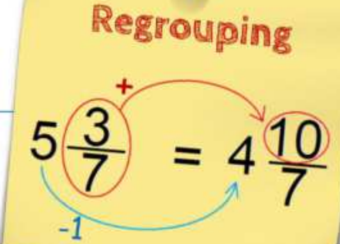
$1 = \frac{5}{5}$ OR $\frac{8}{8}$ OR $\frac{\text{Any number}}{\text{Same number}}$

$2 = 1\frac{7}{7}$ OR $1\frac{8}{8}$ OR $1\frac{\text{Any number}}{\text{Same number}}$ (-1)

$10 = 9\frac{2}{2}$ OR $9\frac{4}{4}$ OR $9\frac{\text{Any number}}{\text{Same number}}$ (-1)

Regrouping The mixed number

Choose				
41	The fraction $2\frac{1}{4}$ by regrouping is _______			
	A. $2\frac{5}{4}$	B. $\frac{9}{2}$	C. $1\frac{5}{4}$	D. $\frac{5}{4}$
42	The mixed number $4\frac{1}{3}$ can be regrouped as _______			
	A. $\frac{13}{4}$	B. $3\frac{1}{4}$	C. $3\frac{4}{3}$	D. $4 + \frac{1}{3}$
43	The fraction $5\frac{3}{7}$ by regrouping is _______			
	A. $5\frac{10}{7}$	B. $4\frac{10}{7}$	C. $3\frac{10}{7}$	D. $\frac{38}{3}$
44	$2\frac{5}{6} = 1\frac{a}{6}$ by regrouping , then a = _______			
	A. 5	B. 11	C. 6	D. 2



45 $5\frac{2}{5}$ can be regrouped as_______

A. $\frac{27}{5}$ B. $5\frac{7}{5}$ C. $\frac{7}{5}$ D. $4\frac{7}{5}$

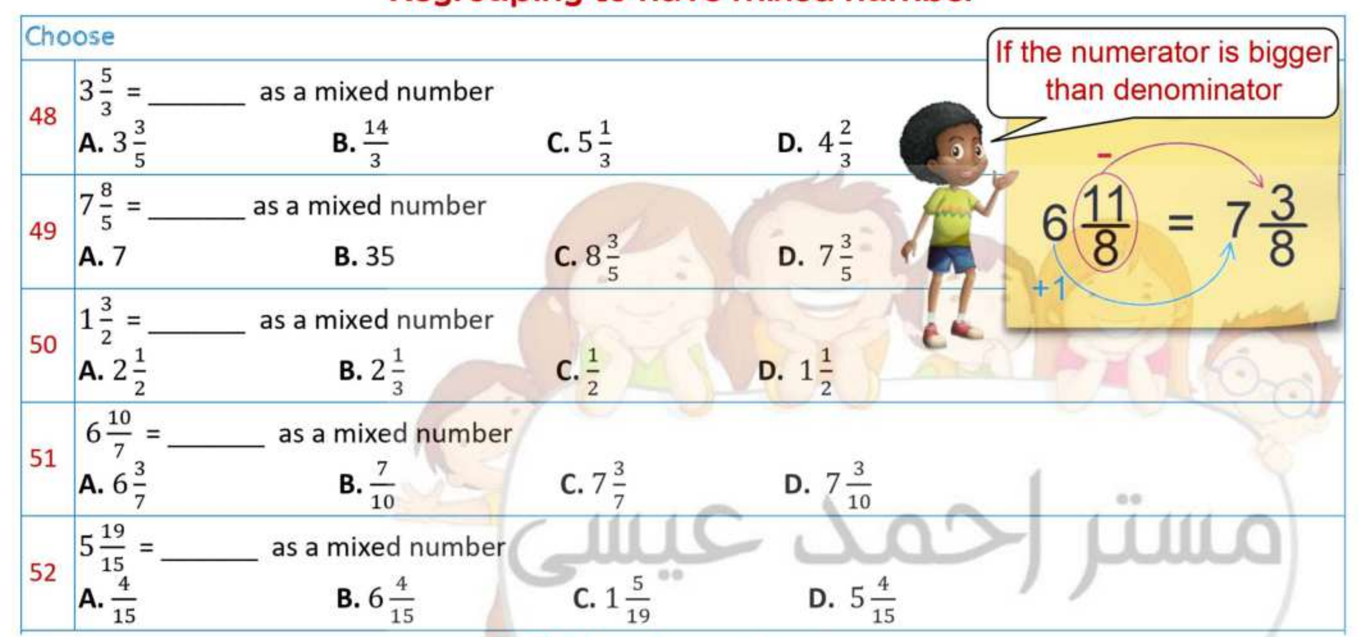
46 If $3\frac{1}{7} = 2\frac{X}{7}$ by regrouping , then X = ________

A. 1 B. 2 C. 3 D. 8

47 $3\frac{4}{7}$ can be regrouped as _______

A. 3 B. 4 C. $2\frac{11}{7}$ D. $2\frac{4}{7}$

Regrouping to have mixed number



Choose

48 $3\frac{5}{3}$ = _______ as a mixed number

A. $3\frac{3}{5}$ B. $\frac{14}{3}$ C. $5\frac{1}{3}$ D. $4\frac{2}{3}$

49 $7\frac{8}{5}$ = _______ as a mixed number

A. 7 B. 35 C. $8\frac{3}{5}$ D. $7\frac{3}{5}$

50 $1\frac{3}{2}$ = _______ as a mixed number

A. $2\frac{1}{2}$ B. $2\frac{1}{3}$ C. $\frac{1}{2}$ D. $1\frac{1}{2}$

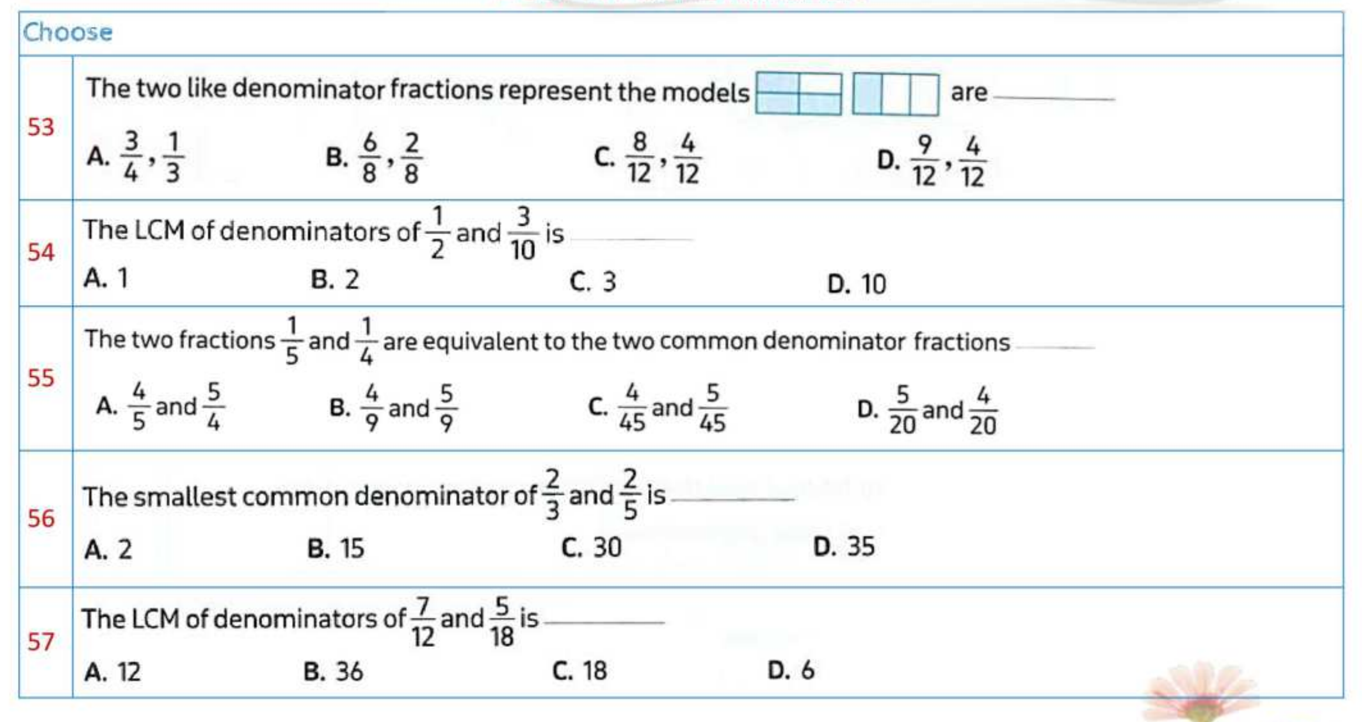
51 $6\frac{10}{7}$ = _______ as a mixed number

A. $6\frac{3}{7}$ B. $\frac{7}{10}$ C. $7\frac{3}{7}$ D. $7\frac{3}{10}$

52 $5\frac{19}{15}$ = _______ as a mixed number

A. $\frac{4}{15}$ B. $6\frac{4}{15}$ C. $1\frac{5}{19}$ D. $5\frac{4}{15}$

LCM for denominators



Choose

53 The two like denominator fractions represent the models are ________

A. $\frac{3}{4}, \frac{1}{3}$ B. $\frac{6}{8}, \frac{2}{8}$ C. $\frac{8}{12}, \frac{4}{12}$ D. $\frac{9}{12}, \frac{4}{12}$

54 The LCM of denominators of $\frac{1}{2}$ and $\frac{3}{10}$ is ________

A. 1 B. 2 C. 3 D. 10

55 The two fractions $\frac{1}{5}$ and $\frac{1}{4}$ are equivalent to the two common denominator fractions ________

A. $\frac{4}{5}$ and $\frac{5}{4}$ B. $\frac{4}{9}$ and $\frac{5}{9}$ C. $\frac{4}{45}$ and $\frac{5}{45}$ D. $\frac{5}{20}$ and $\frac{4}{20}$

56 The smallest common denominator of $\frac{2}{3}$ and $\frac{2}{5}$ is ________

A. 2 B. 15 C. 30 D. 35

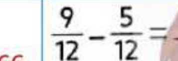
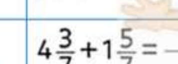
57 The LCM of denominators of $\frac{7}{12}$ and $\frac{5}{18}$ is ________

A. 12 B. 36 C. 18 D. 6

No.	Question	A	B	C	D
58	The like denominator of $\frac{3}{7}$ and $\frac{1}{14}$ is ______	3	7	14	1
59	Two fractions $3\frac{2}{3}$ and $5\frac{1}{6}$ with like denominators are ______	$3\frac{2}{3}$ and $5\frac{1}{6}$	$\frac{11}{3}$ and $\frac{31}{3}$	$3\frac{4}{6}$ and $5\frac{1}{6}$	$3\frac{2}{3}$ and $5\frac{2}{6}$
60	The LCM of the denominators of $\frac{3}{7}$ and $\frac{1}{3}$ is ______	10	4	21	$\frac{7}{3}$
61	Two fractions $2\frac{5}{8}$ and $1\frac{3}{4}$ with like denominators are ______	$2\frac{5}{16}$ and $1\frac{3}{16}$	$1\frac{5}{8}$ and $2\frac{6}{8}$	$2\frac{5}{8}$ and $1\frac{3}{8}$	$2\frac{5}{8}$ and $1\frac{6}{8}$

Adding or subtracting fractions with the same denominators

Choose

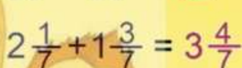
No.	Question	A	B	C	D
62	$\frac{3}{4}+\frac{1}{4}=$ ______	$\frac{4}{8}$	$\frac{3}{16}$	$\frac{8}{8}$	$\frac{31}{44}$
63	$\frac{3}{7}+\frac{4}{7}=$ ______	$\frac{7}{14}$	1	$\frac{34}{77}$	$1\frac{7}{7}$
64	$\frac{11}{7}+\frac{2}{7}=$ ______	$7\frac{1}{7}$	$\frac{13}{14}$	$1\frac{6}{7}$	$7\frac{2}{3}$
65	$\frac{12}{5}+\frac{3}{5}=$ ______	$1\frac{1}{5}$	$\frac{15}{10}$	3	5
66	 $\frac{9}{12}-\frac{5}{12}=$ ______	4	$\frac{1}{3}$	$\frac{14}{12}$	$\frac{1}{4}$
67	 $4\frac{3}{7}+1\frac{5}{7}=$ ______	$5\frac{1}{7}$	$6\frac{1}{7}$	$5\frac{8}{14}$	$6\frac{2}{7}$
68	$1\frac{1}{2}+7\frac{1}{2}=$ ______	$8\frac{1}{2}$	9	8	$8\frac{1}{4}$
69	$2\frac{3}{5}+1\frac{4}{5}=$ ______	$3\frac{7}{10}$	$4\frac{2}{5}$	$1\frac{1}{5}$	$2\frac{7}{5}$
70	$9\frac{4}{7}-9\frac{1}{7}=$ ______	0	$9\frac{3}{7}$	$\frac{3}{7}$	$1\frac{2}{7}$

Same denominators

Keep the denominator and add or subtract the numerators

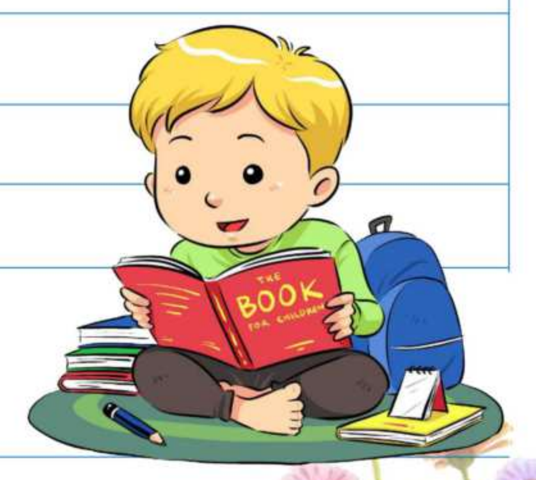
$\frac{2}{9}+\frac{5}{9}=\frac{7}{9}$

$\frac{11}{20}-\frac{8}{20}=\frac{3}{20}$



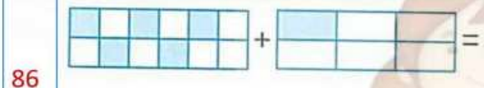
$2\frac{1}{7}+1\frac{3}{7}=3\frac{4}{7}$

71	$\frac{9}{12}-\frac{5}{12}=$ ______ A. 4 B. $\frac{1}{3}$ C. $\frac{14}{12}$ D. $\frac{1}{4}$
72	$5\frac{5}{8}-3\frac{2}{8}=$ ______ A. $8\frac{7}{8}$ B. $3\frac{3}{8}$ C. $2\frac{1}{4}$ D. $2\frac{3}{8}$
73	If $\frac{5}{3}-\frac{2}{3}=a$, then a = ______ A. $\frac{7}{3}$ B. $\frac{3}{3}$ C. $\frac{1}{3}$ D. $\frac{2}{3}$
74	$5\frac{2}{7}+k=6\frac{5}{7}$, then k = ______ A. $11\frac{7}{7}$ B. $1\frac{3}{7}$ C. $4\frac{3}{7}$ D. $5\frac{1}{7}$
75	If $5-a=4\frac{1}{3}$, then a = ______ A. $\frac{1}{3}$ B. $\frac{2}{3}$ C. $4\frac{1}{3}$ D. $4\frac{2}{3}$
76	If $X+3\frac{1}{8}=5\frac{3}{8}$, then X = ______ A. $8\frac{1}{2}$ B. $2\frac{2}{16}$ C. $4\frac{2}{8}$ D. $2\frac{1}{4}$
77	$4\frac{3}{5}+k=6\frac{2}{5}$, then k = ______ A. $1\frac{4}{5}$ B. 11 C. $2\frac{1}{5}$ D. $1\frac{3}{5}$
Complete	
78	$2\frac{5}{6}+2\frac{3}{6}=$ ____
79	$1\frac{3}{5}+3\frac{1}{5}=$ ____
80	$8\frac{3}{7}-8\frac{1}{7}=$ ____
81	$1\frac{2}{3}+3\frac{2}{3}=$ ____
82	$5\frac{1}{4}-2\frac{3}{4}=$ ____
83	$2\frac{1}{4}+2\frac{3}{4}=$ ____
84	$3\frac{2}{5}-1\frac{4}{5}=$ ____
85	$4\frac{5}{6}-2\frac{1}{6}=$ ____



LCM of denominators and add or subtract

Choose

86	 = ______ A. $\frac{8}{12}$ B. $\frac{7}{12}$ C. $\frac{7}{6}$ D. $\frac{5}{6}$
87	– = ______ A. $\frac{1}{3}$ B. $\frac{5}{6}$ C. $\frac{1}{6}$ D. 1
88	+ = ______ A. $\frac{2}{3}$ B. $\frac{3}{4}$ C. 1 D. $\frac{5}{6}$
89	+ = ______ A. $\frac{1}{3}+\frac{1}{3}$ B. $\frac{1}{2}+\frac{1}{2}$ C. $\frac{1}{2}+\frac{1}{3}$ D. $3+2$
90	$\frac{1}{11}+\frac{3}{4}=$ ______ A. $\frac{4}{15}$ B. $\frac{37}{44}$ C. $\frac{11}{15}$ D. $\frac{4}{44}$
91	$3\frac{3}{8}-2\frac{1}{4}=$ ______ A. $1\frac{1}{8}$ B. $1\frac{1}{4}$ C. $2\frac{1}{4}$ D. $\frac{1}{8}$
92	$1\frac{4}{5}-1\frac{1}{20}=$ ______ A. $\frac{7}{20}$ B. $\frac{4}{3}$ C. $\frac{3}{4}$ D. $1\frac{1}{5}$
93	$5\frac{1}{2}+3\frac{1}{5}=$ ______ A. $8\frac{2}{7}$ B. $8\frac{7}{10}$ C. $8\frac{1}{2}$ D. $8\frac{2}{5}$
94	$2\frac{1}{7}+5\frac{1}{2}=$ ______ A. $7\frac{2}{9}$ B. $3\frac{9}{14}$ C. $7\frac{9}{14}$ D. $1\frac{1}{7}$
95	$\frac{3}{4}+\frac{1}{2}=$ ______ A. $\frac{4}{6}$ B. $\frac{3}{8}$ C. $\frac{1}{4}$ D. $1\frac{1}{4}$
96	$3\frac{1}{2}+2\frac{1}{3}=$ ______ A. $5\frac{5}{6}$ B. $5\frac{2}{5}$ C. $\frac{6}{2}+\frac{6}{3}$ D. $\frac{7}{2}+3\frac{1}{2}$

Different denominators

Find LCM of denominators and add or subtract the numerators

$\frac{5}{6}+\frac{1}{3} \Rightarrow \frac{5}{6}+\frac{2}{6}=\frac{7}{6}$ **or** $1\frac{1}{6}$

$4\frac{5}{7}-1\frac{1}{4} \Rightarrow 4\frac{20}{28}-1\frac{7}{28}=3\frac{13}{28}$

97	$3\frac{1}{2} - 1\frac{2}{3} =$ ______ A. $1\frac{5}{6}$ B. $6\frac{1}{5}$ C. $5\frac{1}{6}$ D. $1\frac{6}{5}$
98	If $X + 5\frac{1}{4} = 7\frac{3}{4}$, then X = ______ A. $2\frac{1}{4}$ B. $2\frac{1}{2}$ C. $\frac{1}{2}$ D. $\frac{1}{4}$
99	If $\frac{4}{7} + \frac{1}{3} = \frac{X}{21} + \frac{7}{21}$, then X = ______ A. 4 B. 3 C. 7 D. 12
100	$X + 4\frac{1}{4} = 5\frac{1}{2}$, then X = ______ A. $\frac{1}{2}$ B. $\frac{1}{4}$ C. $1\frac{1}{2}$ D. $1\frac{1}{4}$
101	If $\frac{1}{2} + a = \frac{7}{8}$, then a = ______ A. $\frac{6}{6}$ B. $\frac{3}{8}$ C. $\frac{8}{10}$ D. $1\frac{1}{8}$
102	$2\frac{1}{3} + 1\frac{2}{5}$ can be rewrite as ______ A. $\frac{6}{3} + \frac{5}{5}$ B. $\frac{7}{3} + \frac{5}{7}$ C. $[2+1] + [\frac{1}{3} + \frac{2}{5}]$ D. $3\frac{1}{2} + 5\frac{1}{2}$
Complete	
103	$2\frac{2}{5} + 1\frac{1}{2} =$ ______
104	$1\frac{4}{7} - \frac{10}{21} =$ ______
105	$3\frac{2}{3} + 2\frac{4}{5} =$ ______
106	$2\frac{5}{6} - 1\frac{2}{3} =$ ______
107	$2\frac{3}{8} + 5\frac{3}{4} =$ ______
108	$2\frac{3}{5} - 1\frac{1}{3} =$ ______
109	$1\frac{3}{4} - \frac{1}{2} =$ ______
110	$9\frac{2}{3} - 6\frac{1}{2} =$ ______
111	$2\frac{5}{12} + 1\frac{1}{6} =$ ______
112	$3\frac{1}{2} - 1\frac{2}{5} =$ ______
113	$4\frac{5}{8} - 3\frac{1}{6} =$ ______
114	$2\frac{3}{4} + 1\frac{4}{10} =$ ______
115	$7\frac{5}{6} - 4\frac{1}{4} =$ ______



116	$2\frac{7}{8} - 1\frac{1}{2} =$ ____

Regrouping in operations

Choose

117	$\frac{17}{5} - 1 =$ ____ **A.** $5\frac{1}{17}$ **B.** $2\frac{2}{5}$ **C.** $\frac{16}{5}$ **D.** $2\frac{1}{5}$
118	$1 - \frac{3}{4} =$ ____ **A.** $\frac{1}{4}$ **B.** $\frac{2}{4}$ **C.** $\frac{3}{4}$ **D.** $\frac{4}{4}$
119	$1 - \frac{5}{11} =$ ____ **A.** $\frac{5}{11}$ **B.** $1\frac{5}{11}$ **C.** $1\frac{7}{11}$ **D.** $\frac{7}{11}$
120	$3 - 2\frac{1}{2} =$ ____ **A.** $\frac{1}{2}$ **B.** $1\frac{1}{2}$ **C.** 1 **D.** $1\frac{1}{3}$
121	$1 - \frac{1}{2} - \frac{1}{3} =$ ____ **A.** $\frac{1}{2}$ **B.** $\frac{1}{3}$ **C.** $\frac{1}{5}$ **D.** $\frac{1}{6}$
122	$4 - \frac{3}{5} =$ ____ **A.** $\frac{1}{5}$ **B.** $4\frac{3}{5}$ **C.** $3\frac{2}{5}$ **D.** $\frac{7}{20}$
123	$5 - \frac{1}{2} - \frac{1}{3} =$ ____ **A.** $4\frac{5}{6}$ **B.** $4\frac{1}{2}$ **C.** $4\frac{1}{6}$ **D.** $4\frac{3}{4}$
124	$2\frac{1}{4} - 1\frac{1}{2} =$ ____ **A.** $1\frac{1}{4}$ **B.** $\frac{3}{4}$ **C.** $3\frac{3}{4}$ **D.** $1\frac{1}{2}$
125	$7\frac{1}{11} - 5\frac{5}{11} =$ ____ **A.** $2\frac{3}{11}$ **B.** $\frac{4}{11}$ **C.** $1\frac{7}{11}$ **D.** $2\frac{4}{11}$
126	$3\frac{4}{9} - 1\frac{2}{3} =$ ____ **A.** $1\frac{7}{9}$ **B.** $\frac{7}{9}$ **C.** $5\frac{1}{9}$ **D.** $2\frac{2}{9}$
127	$\frac{2}{5} + \frac{3}{8} + 1 =$ ____ **A.** $1\frac{31}{40}$ **B.** $1\frac{5}{13}$ **C.** $1\frac{5}{40}$ **D.** $1\frac{6}{40}$

$1 - \frac{5}{8} \Rightarrow \frac{8}{8} - \frac{5}{8} = \frac{3}{8}$

$3 - 1\frac{1}{5} \Rightarrow 2\frac{5}{5} - 1\frac{1}{5} = 1\frac{4}{5}$

$4\frac{1}{4} - 1\frac{3}{4} \Rightarrow 3\frac{5}{4} - 1\frac{3}{4} = 2\frac{2}{4} = 2\frac{1}{2}$

Complete

128	$6\frac{1}{5} - 4\frac{3}{4} =$ ____
129	$9\frac{1}{4} - 8\frac{3}{5} =$ ____

130	$6\frac{1}{3} - 3\frac{4}{5} =$ ______
131	$3\frac{1}{2} - 2\frac{2}{3} =$ ______
132	$7\frac{1}{2} - 2\frac{7}{8} =$ ______
133	$4\frac{1}{4} - 2\frac{5}{6} =$ ______
134	$9\frac{1}{6} - 3\frac{1}{3} =$ ______
135	$5\frac{1}{3} - 2\frac{4}{5} =$ ______
136	$9\frac{1}{4} - 8\frac{3}{5} =$ ______

Estimating using Benchmark

Choose	
137	If $3\frac{x}{29}$ is about 4 , then x may be ______ A. 13 B. 2 C. 7 D. 28
138	If $3\frac{2}{a}$ is estimated as 3 , then a can equal ______ A. 2 B. 1 C. 4 D. 15
139	If $4\frac{k}{23}$ is about $4\frac{1}{2}$, then k may be = ______ A. 2 B. 3 C. 4 D. 11
140	If $4\frac{m}{17}$ is about 4 , then m may be ______ A. 2 B. 8 C. 10 D. 17
141	If $4\frac{h}{54}$ is slightly greater than $4\frac{1}{2}$, then h may be ______ A. 20 B. 4 C. 28 D. 54
142	If $5\frac{20}{y}$ is a little less than 6 , then y may be ______ A. 21 B. 5 C. 2 D. 39
143	If $9\frac{X}{5}$ is little greater than $9\frac{1}{2}$, then X is estimated as ______ A. 3 B. 5 C. 2 D. 1
144	If $2\frac{3}{j}$ is a little greater than 2 , then j may be ______ A. 2 B. 4 C. 6 D. 17
145	If $4\frac{X}{22}$ is slightly greater than $4\frac{1}{2}$, then X can be ______ A. 10 B. 21 C. 5 D. 12
146	If $5\frac{n}{18}$ is about 5 , then n may be ______ A. 8 B. 17 C. 2 D. 12

147	If $7\frac{a}{8}$ is a little greater than $7\frac{1}{2}$, then a may be ______ **A.** 4 **B.** 5 **C.** 7 **D.** 8
148	If $3\frac{5}{m}$ is about 4, then m may be ______ A. 6 **B.** 8 **C.** 10 **D.** 12
149	$5\frac{X}{24}$ is slightly greater than $5\frac{1}{2}$, then X may be ______ **A.** 23 **B.** 9 **C.** 11 **D.** 13
150	If $5\frac{X}{12}$ is slightly greater than $5\frac{1}{2}$, then X may be equal to ______ **A.** 7 **B.** 11 **C.** 9 **D.** 10
151	If $8\frac{3}{C}$ is slightly less than $8\frac{1}{2}$, then C may be ______ **A.** 7 **B.** 4 **C.** 2 **D.** 15
152	If $4\frac{b}{7}$ is almost 4, then b may be ______ **A.** 1 **B.** 4 **C.** 5 **D.** 6
153	If $2\frac{8}{d}$ is nearly $2\frac{1}{2}$, then d may be ______ **A.** 32 **B.** 5 **C.** 7 **D.** 17
154	$\frac{1}{6}+\frac{6}{7}$ is estimated as ______ **A.** $\frac{1}{2}+\frac{1}{2}$ **B.** $0+1$ **C.** $0+\frac{1}{2}$ **D.** $\frac{1}{2}+1$
155	$\frac{1}{4}+\frac{8}{9}$ is estimated as ______ **A.** 0 **B.** $\frac{1}{2}$ **C.** 1 **D.** $1\frac{1}{2}$
156	Estimate the sum of $\frac{3}{5}+\frac{7}{8}$ using benchmarks, the sum is ______ **A.** 2 **B.** $1\frac{1}{2}$ **C.** 1 **D.** $\frac{1}{2}$
157	$5\frac{3}{7}+2\frac{1}{11}$ can estimated as ______ **A.** 7 **B.** $7\frac{1}{2}$ **C.** 8 **D.** $8\frac{1}{2}$
158	$5\frac{1}{6}+2\frac{4}{5}$ is estimate as ______ **A.** $5+3$ **B.** $6+3$ **C.** $5+2$ **D.** $6+4$
159	$8\frac{3}{5}+1\frac{1}{12}$ can estimated as ______ **A.** 9 **B.** $9\frac{1}{2}$ **C.** 10 **D.** $8\frac{1}{2}$

160 $1\frac{5}{11} + 2\frac{1}{8}$ estimate as ________

A. $1 + 2$ B. $1 + 2\frac{1}{2}$ C. $1\frac{1}{2} + 2$ D. $2 + 2$

161 Which of the following is underestimate?

A. $\frac{4}{7} + \frac{5}{8}$ is about 1 B. $\frac{3}{7} + \frac{4}{10}$ is about 1

C. $\frac{4}{5} + \frac{7}{8}$ is about 2 D. $\frac{6}{7} + \frac{5}{6}$ is about 2

162 Which of the following is underestimate?

A. $6\frac{7}{8} + \frac{5}{6} = 8$ B. $\frac{1}{3} + 1\frac{1}{10} = 1$ C. $\frac{3}{10} + \frac{7}{9} = 1\frac{1}{2}$ D. $5\frac{8}{9} + \frac{8}{7} = 6$

Complete

163 By using the benchmarks, $\frac{5}{6}$ is estimate as ________

164 $2\frac{b}{9}$ is almost 3 Estimate for b = ________

165 $\frac{7}{12} + \frac{9}{10}$ is estimated as ________

166 $8\frac{2}{3} + 1\frac{5}{6}$ is estimated as ________ + ________

167 $\frac{4}{5} + \frac{7}{6}$ is estimated as ________ + ________ = ________

Multiplying fractions

Choose

168 $\frac{2}{15} \times 1\frac{1}{5} =$ ________

A. $\frac{2}{25}$ B. $1\frac{3}{15}$ C. $\frac{4}{25}$ D. $1\frac{2}{25}$

169 $2\frac{1}{5} \times 1\frac{2}{3} =$ ________

A. $\frac{2}{3}$ B. $3\frac{2}{3}$ C. $\frac{2}{15}$ D. $2\frac{2}{15}$

170 $0.25 \times \frac{6}{7} =$ ________

A. $\frac{1}{14}$ B. $\frac{1}{7}$ C. $\frac{3}{14}$ D. $\frac{2}{7}$

171 $\frac{5}{9} \times 1\frac{1}{5} =$ ________

A. $\frac{5}{14}$ B. $1\frac{2}{3}$ C. $\frac{2}{3}$ D. $1\frac{9}{25}$

172 $\frac{2}{3} \times \frac{3}{8} \times \frac{8}{9} =$ ________

A. $\frac{1}{3}$ B. $\frac{2}{9}$ C. $\frac{13}{20}$ D. $\frac{2}{17}$

$\frac{3}{7} \times \frac{2}{5} = \frac{6}{35}$

$\frac{2}{9} \times \frac{3}{4} = \frac{1}{6}$

$2\frac{2}{5} \times 1\frac{1}{6} = \frac{12}{5} \times \frac{7}{6} = \frac{14}{5}$

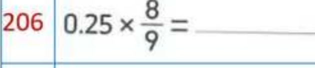
173 $7\frac{1}{2} \times \frac{1}{15} =$ ________

A. 2 B. $\frac{1}{2}$ C. $\frac{16}{17}$ D. $7\frac{1}{30}$

174	$\frac{4}{11} \times 0.5 =$ ______ A. $\frac{2}{11}$ B. $\frac{20}{11}$ C. $\frac{4}{5}$ D. $\frac{55}{4}$
175	$4\frac{2}{3} \times 1\frac{2}{7} =$ ______ A. $4\frac{4}{21}$ B. $5\frac{20}{21}$ C. $4\frac{2}{21}$ D. 6
176	If $a \times \frac{3}{17} = \frac{2}{17}$, then a = ______ A. $\frac{2}{3}$ B. $\frac{3}{2}$ C. $\frac{1}{17}$ D. $\frac{5}{17}$
177	$\frac{1}{5} \times 0.5 =$ ______ A. $\frac{2}{7}$ B. $\frac{1}{7}$ C. $\frac{1}{10}$ D. $\frac{1}{25}$
178	$0.25 \times \frac{8}{9} =$ ______ A. $\frac{1}{4}$ B. $\frac{2}{3}$ C. $\frac{4}{9}$ D. $\frac{2}{9}$
179	$\frac{1}{7} \times m = \frac{1}{21}$, then m = ______ A. $\frac{1}{7}$ B. $\frac{1}{21}$ C. $\frac{1}{3}$ D. $\frac{1}{147}$
180	$\frac{4}{3} \times \frac{3}{5}$ is ______ $1\frac{1}{3}$ A. less than B. greater than C. equal to
181	$\frac{3}{7} \times \frac{5}{5}$ is ______ $\frac{3}{7}$ A. greater than B. less than C. equal to
182	$\frac{4}{7} \times \frac{14}{8}$ is ______ $\frac{4}{7}$ A. less than B. greater than C. equal to
183	$\frac{3}{5} \times \frac{5}{3}$ is ______ $\frac{3}{5}$ A. less than B. greater than C. equal to
184	$\frac{5}{3} \times \frac{4}{7}$ is ______ $\frac{5}{3}$ A. less than B. greater than C. equal to
185	$\frac{3}{4} \times \frac{12}{150}$ is ______ $\frac{3}{4}$ A. less than B. greater than C. equal to
186	$3\frac{5}{6} \times \frac{7}{4}$ is ______ $3\frac{5}{6}$ A. less than B. greater than C. equal to
Complete	
187	$\frac{1}{2} \times \frac{1}{5} =$ ______

$0.25 = \frac{25}{100} = \frac{1}{4}$

$0.5 = \frac{5}{10} = \frac{1}{2}$

188	$\frac{3}{4} \times \frac{1}{2} =$ ______
189	$\frac{3}{4} \times \frac{3}{8} =$ ______
190	$\frac{3}{5} \times \frac{1}{4} =$ ______
191	$\frac{1}{3} \times \frac{3}{8} =$ ______
192	$\frac{5}{8} \times \frac{3}{3} =$ ______
193	$\frac{5}{12} \times \frac{3}{5} =$ ______
194	$\frac{3}{9} \times \frac{3}{4} =$ ______
195	$\frac{1}{2} \times \frac{2}{8} =$ ______
196	$\frac{5}{8} \times \frac{2}{15} =$ ______
197	$\frac{5}{10} \times \frac{8}{10} =$ ______
198	$\frac{1}{4} \times \frac{8}{11} =$ ______
199	$\frac{2}{3} \times \frac{6}{7} \times \frac{7}{8} =$ ______
200	$\frac{4}{10} \times \frac{25}{3} \times \frac{3}{15} =$ ______
201	$2\frac{2}{5} \times 1\frac{1}{2} =$ ______
202	$2\frac{1}{2} \times 1\frac{1}{10} =$ ______
203	$1\frac{2}{3} \times \frac{3}{10} =$ ______
204	$2\frac{3}{4} \times 1\frac{2}{3} =$ ______
205	 $3\frac{4}{6} \times \frac{1}{4} =$ ______
206	 $0.25 \times \frac{8}{9} =$ ______
207	$2\frac{2}{5} \times \frac{2}{3} =$ ______
208	$\frac{4}{5} \times$ ______ $= \frac{4}{15}$
209	$\frac{1}{4} \times \frac{__}{3} = \frac{7}{12}$
210	$\frac{2}{7} \times$ ______ $= \frac{10}{49}$

Well done!

211	____ $\times \frac{3}{8} = \frac{15}{24}$
212	____ $\times \frac{3}{5} = \frac{6}{15}$
213	$\frac{5}{4} \times \frac{3}{8} =$ ____
214	$\frac{1}{2} \times$ ____ $= \frac{3}{8}$

The product = 1

Choose	
215	$\frac{3}{11} \times \frac{11}{3} =$ ______ **A.** $\frac{3}{11}$ **B.** $\frac{11}{3}$ **C.** 1 **D.** $\frac{1}{2}$
216	$\frac{1}{2} \times 2 =$ ______ **A.** $\frac{1}{4}$ **B.** $\frac{3}{2}$ **C.** 1 **D.** 4
217	$\frac{1}{7} \times 7 =$ ______ **A.** $\frac{1}{14}$ **B.** $\frac{1}{49}$ **C.** 7 **D.** 1
218	$5 \times \frac{1}{5} =$ ______ **A.** 1 **B.** $\frac{1}{5}$ **C.** 25 **D.** 0
219	$\frac{5}{6} \times$ ____ $= 1$ **A.** $\frac{5}{6}$ **B.** $\frac{4}{5}$ **C.** $\frac{6}{5}$ **D.** $\frac{1}{6}$
220	$2\frac{1}{3} \times$ ____ $= 1$ **A.** $\frac{3}{2}$ **B.** $\frac{1}{3}$ **C.** $\frac{7}{3}$ **D.** $\frac{3}{7}$
221	$2\frac{1}{3} \times \frac{3}{7} =$ ____ A. $\frac{4}{4}$ B. $\frac{3}{7}$ C. $2\frac{1}{7}$ D. $\frac{7}{3}$
222	____ $\times 5\frac{2}{5} = 1$ **A.** $\frac{5}{27}$ **B.** $\frac{27}{5}$ **C.** $\frac{5}{2}$ **D.** $1\frac{2}{5}$
223	____ $\times 1\frac{1}{2} = 1$ **A.** $\frac{1}{2}$ **B.** $\frac{3}{2}$ **C.** $\frac{2}{3}$ **D.** $\frac{1}{3}$
224	$1\frac{1}{5} \times$ ____ $= 1$ A. 5 B. $\frac{5}{4}$ C. $\frac{5}{6}$ D. $\frac{6}{5}$
225	$2\frac{1}{3} \times$ ____ $= 1$ A. $\frac{7}{3}$ B. $\frac{3}{7}$ C. $3\frac{1}{2}$ D. 6
226	$\frac{3}{4} \times$ ____ $= 1$ **A.** $\frac{3}{4}$ **B.** $\frac{4}{3}$ **C.** $\frac{1}{4}$ **D.** $\frac{1}{3}$

$\frac{7}{5} \times \frac{5}{7} = 1$

$1\frac{2}{3} \times \frac{3}{5} \Rightarrow \frac{5}{3} \times \frac{3}{5} = 1$

Dividing fractions

Choose

227	$7 \div \frac{1}{2} =$ ______ A. $3\frac{1}{2}$ B. 3 C. 14 D. 16
228	$12 \div 8 = 1\frac{1}{__}$ A. 2 B. 3 C. 4 D. 5
229	$13 \div \frac{1}{4} =$ ______ A. $\frac{13}{4}$ B. $\frac{1}{52}$ C. 17 D. 52
230	$3 \div \frac{1}{5} =$ ______ A. $\frac{3}{5}$ B. $\frac{1}{15}$ C. 15 D. $\frac{5}{3}$
231	$13 \div 7$ equals each of the following except ______ A. $1+\frac{6}{7}$ B. $1\frac{6}{7}$ C. $\frac{26}{14}$ D. $1\times\frac{6}{7}$
232	$16 \div 7 = 2\frac{2}{__}$ A. 7 B. 14 C. 16 D. 4
233	$\frac{1}{3} \div 5 =$ ______ A. $\frac{5}{3}$ B. $\frac{3}{5}$ C. 15 D. $\frac{1}{15}$
234	$4 \div \frac{1}{2} =$ ______ A. 6 B. 2 C. 8 D. $4\frac{1}{2}$
235	$7 \div \frac{1}{2} =$ ______ A. $3\frac{1}{2}$ B. 3 C. 14 D. 16
236	$15 \div \frac{1}{2} =$ ______ A. $\frac{15}{2}$ B. $7\frac{1}{2}$ C. 30 D. $\frac{2}{15}$
237	$\frac{1}{2} \div 6 =$ ______ A. 3 B. $\frac{1}{12}$ C. $\frac{2}{6}$ D. $\frac{1}{8}$
238	$15 \div 4 =$ ______ $+3$ A. 12 B. 3 C. $\frac{4}{3}$ D. $\frac{3}{4}$
239	$14 \div 5 =$ ______ $+2$ A. $\frac{2}{5}$ B. $\frac{3}{5}$ C. $\frac{4}{5}$ D. $\frac{1}{5}$

$5 \div \frac{1}{3} \Rightarrow 5 \times 3 = 15$

$\frac{1}{4} \div 7 \Rightarrow \frac{1}{4} \times \frac{1}{7} = \frac{1}{21}$

$\frac{1}{9} \div \frac{4}{11} \Rightarrow \frac{1}{9} \times \frac{11}{4} = \frac{11}{36}$

No.	Question
240	If $17 \div 8 = a\frac{1}{8}$, then a = ______ A. 2 B. 8 C. 17 D. 1
241	If $\frac{1}{2} \div m = \frac{1}{16}$, then m = ______ A. 8 B. $\frac{1}{8}$ C. 14 D. $\frac{1}{14}$
242	If $6 \div h = 30$, then h = ______ A. $\frac{1}{5}$ B. 180 C. 5 D. 90
243	If $\frac{1}{2} \div 3 = X$, then X = ______ A. $1\frac{1}{2}$ B. $\frac{1}{6}$ C. 6 D. $\frac{2}{3}$
244	If $8 \div m = 24$, then m = ______ A. 3 B. $\frac{1}{3}$ C. $1\frac{1}{3}$ D. 32
245	$12 \div 5$ equals each of the following except ______ A. $\frac{5}{12}$ B. $\frac{12}{5}$ C. $2\frac{2}{5}$ D. $2+\frac{2}{5}$
246	How many fifths are there in 7 ? A. $5 \div 7$ B. 5×7 C. $5 + 7$ D. $7 - 5$
247	How many thirds are there in 2 ? A. 5 B. 2 C. 6 D. $\frac{3}{2}$
248	The number of fifths in 4 is ______ A. 9 B. 1 C. 20 D. $\frac{5}{4}$
249	How many thirds are there in 9 ? A. 18 B. 27 C. 36 D. 24
250	The number of thirds in one is ______ A. 1 B. 2 C. 3 D. $\frac{1}{3}$
251	If we divide 7 oranges among 5 persons, then each person has ______ orange. A. $\frac{5}{7}$ B. $1\frac{1}{5}$ C. $2\frac{1}{5}$ D. $1\frac{2}{5}$
252	If Ahmed bought 7 kg of meat and wanted to divide it into 5 meals , then the number of kg in each meal = ______ kg A. 7×5 B. $5 \div 7$ C. $1\frac{2}{5}$ D. $7 - 5$
Complete	
253	$5 \div \frac{1}{2} =$ ______

How many fourths in 3 ?

$3 \div \frac{1}{4} \Rightarrow 3 \times 4 = 12$



254	$7 \div \frac{1}{4} =$ ______
255	$\frac{1}{3} \div 6 =$ ______
256	$\frac{1}{6} \div 4 =$ ______
257	$13 \div \frac{1}{4} =$ ______
258	$3 \div \frac{1}{5} =$ ______

Area of a rectangle

Choose

259	The area of the opposite rectangle = ______ square units. A. 15 B. 18 C. 20 D. 24
260	Area of rectangle = ______ A. L + W B. L × W C. L ÷ W D. (L + W) × 2
261	Area of rectangle = ______ × w. A. l B. w C. h D. base area
262	The area of rectangle whose dimensions are $\frac{1}{3}$ m and $\frac{1}{4}$ m is ______ A. $\frac{1}{12}$ m^2 B. $\frac{3}{4}$ m^2 C. $\frac{1}{12}$ cm^2 D. $\frac{1}{12}$ m
263	The area of rectangle of length $\frac{2}{3}$ cm and width $\frac{1}{4}$ cm is ______ cm^2 A. $\frac{11}{12}$ B. $\frac{1}{6}$ C. $\frac{5}{12}$ D. $\frac{3}{8}$
264	The area of rectangle of dimensions $5\frac{1}{2}$ meters and $2\frac{1}{2}$ meters is ______ A. $13\frac{3}{4}$ m B. 8 m C. 8 m^2 D. $13\frac{3}{4}$ m^2
265	The area of rectangle of length $\frac{3}{4}$ cm and width $\frac{2}{5}$ cm is ______ cm^2 A. $\frac{1}{4}$ B. $\frac{5}{9}$ C. $\frac{3}{10}$ D. $\frac{2}{3}$
266	The area of rectangle of dimensions $7\frac{1}{2}$ meters and $2\frac{1}{5}$ meters is ______ m^2 A. $5\frac{3}{10}$ B. $14\frac{3}{10}$ C. $9\frac{7}{10}$ D. $16\frac{1}{2}$
267	The area of rectangle of dimensions $\frac{2}{5}$ m and $\frac{1}{3}$ m ◯ The area of rectangle of length $\frac{3}{8}$ m and width $\frac{1}{5}$ m A. > B. < C. =

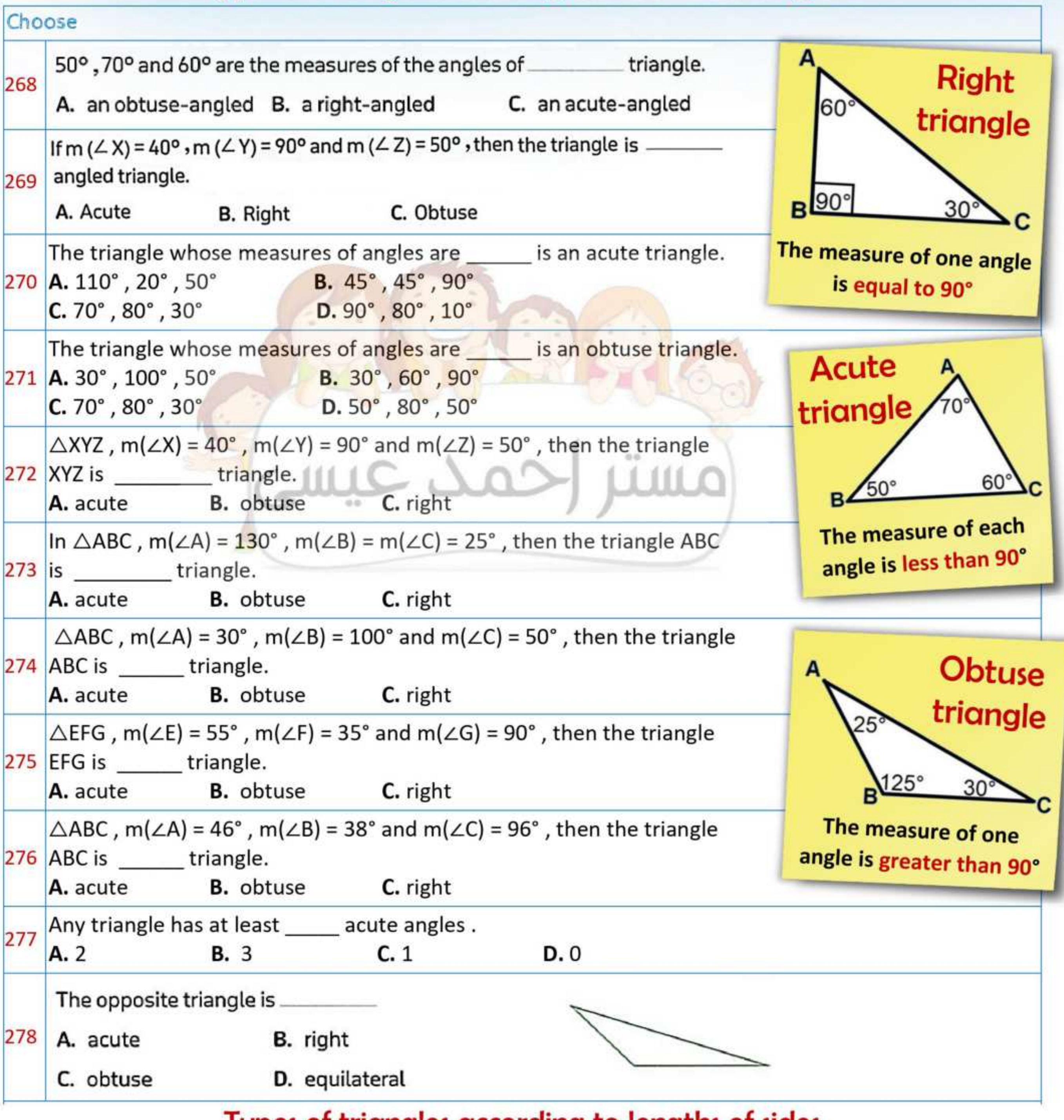
Area of rectangle

Length

Width

Area = L × W

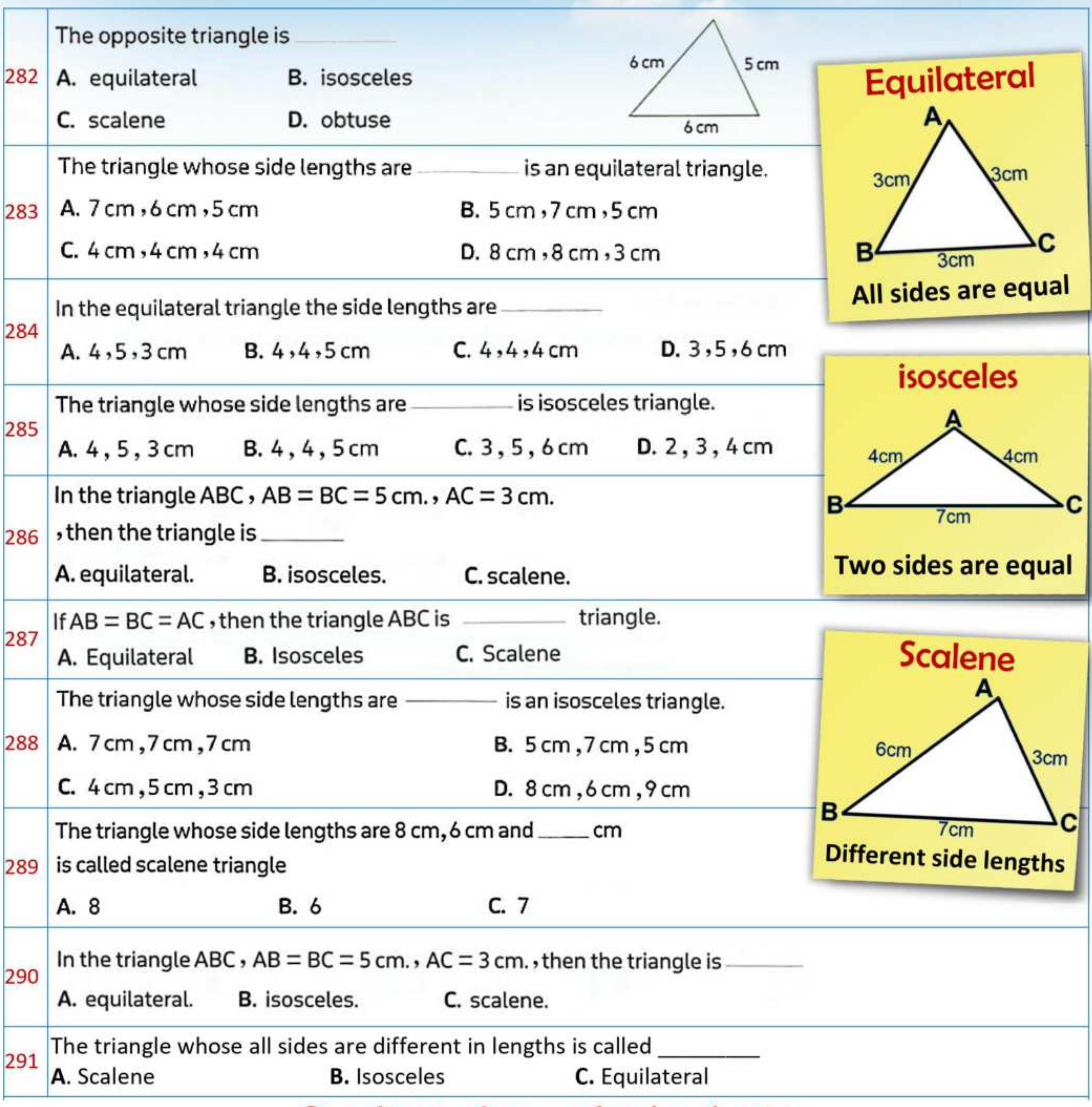
Types of triangles according to measure of angles



Choose	
268	50°, 70° and 60° are the measures of the angles of ______ triangle. A. an obtuse-angled B. a right-angled C. an acute-angled
269	If m (∠ X) = 40°, m (∠ Y) = 90° and m (∠ Z) = 50°, then the triangle is ______ angled triangle. A. Acute B. Right C. Obtuse
270	The triangle whose measures of angles are ______ is an acute triangle. A. 110°, 20°, 50° B. 45°, 45°, 90° C. 70°, 80°, 30° D. 90°, 80°, 10°
271	The triangle whose measures of angles are ______ is an obtuse triangle. A. 30°, 100°, 50° B. 30°, 60°, 90° C. 70°, 80°, 30° D. 50°, 80°, 50°
272	△XYZ, m(∠X) = 40°, m(∠Y) = 90° and m(∠Z) = 50°, then the triangle XYZ is ______ triangle. A. acute B. obtuse C. right
273	In △ABC, m(∠A) = 130°, m(∠B) = m(∠C) = 25°, then the triangle ABC is ______ triangle. A. acute B. obtuse C. right
274	△ABC, m(∠A) = 30°, m(∠B) = 100° and m(∠C) = 50°, then the triangle ABC is ______ triangle. A. acute B. obtuse C. right
275	△EFG, m(∠E) = 55°, m(∠F) = 35° and m(∠G) = 90°, then the triangle EFG is ______ triangle. A. acute B. obtuse C. right
276	△ABC, m(∠A) = 46°, m(∠B) = 38° and m(∠C) = 96°, then the triangle ABC is ______ triangle. A. acute B. obtuse C. right
277	Any triangle has at least ______ acute angles. A. 2 B. 3 C. 1 D. 0
278	The opposite triangle is ______ A. acute B. right C. obtuse D. equilateral

Types of triangles according to lengths of sides

Choose	
279	The triangle whose all sides are equal in length is called ______ triangle A. acute B. obtuse C. right
280	There are two equal sides only in the ______ triangle A. acute B. obtuse C. right
281	The triangle whose side lengths are ______ is isosceles triangle. A. 4, 5, 3 cm B. 4, 4, 5 cm C. 3, 5, 6 cm D. 2, 3, 4 cm



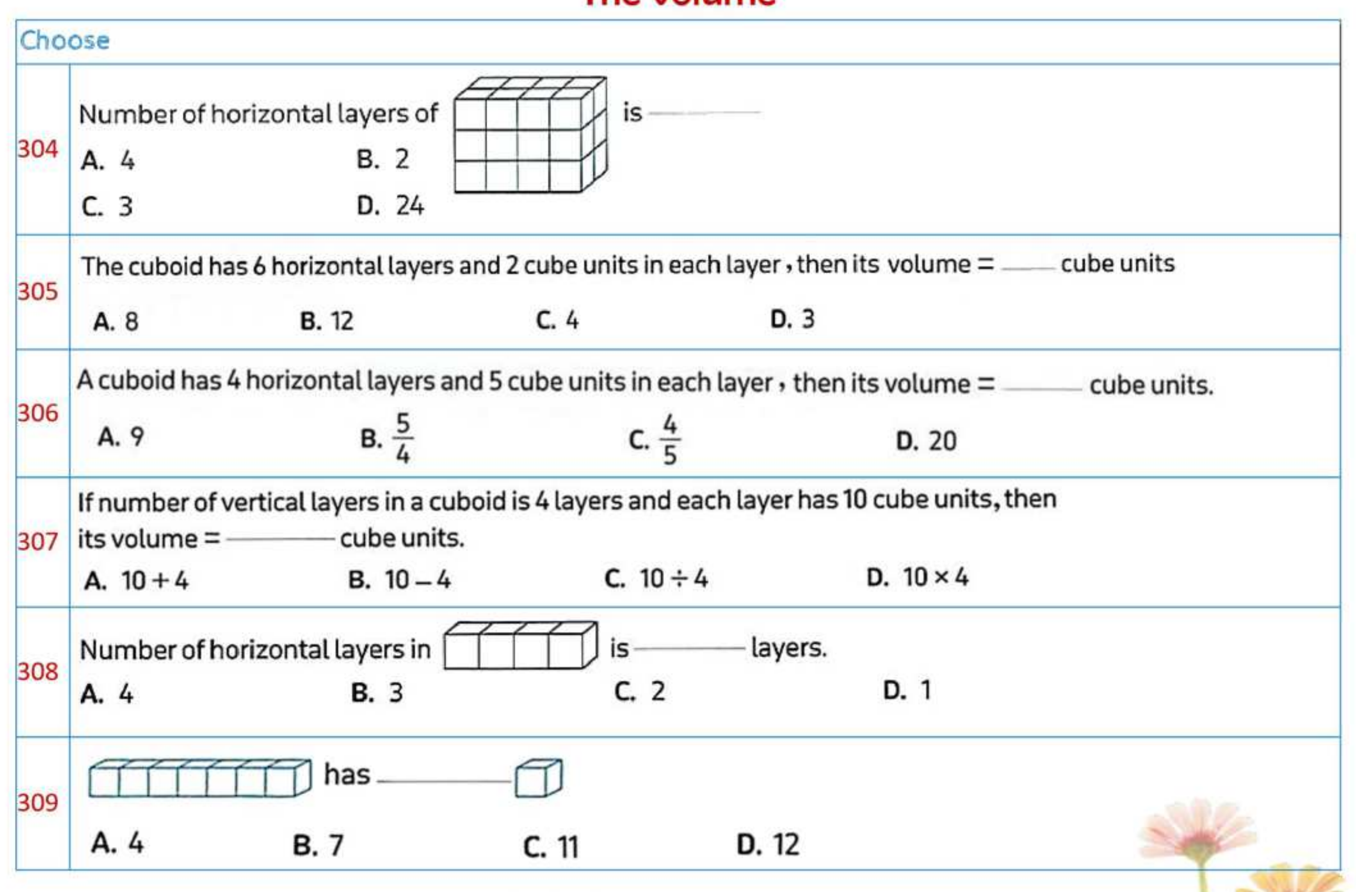
282	The opposite triangle is ______ A. equilateral B. isosceles C. scalene D. obtuse
283	The triangle whose side lengths are ______ is an equilateral triangle. A. 7 cm , 6 cm , 5 cm B. 5 cm , 7 cm , 5 cm C. 4 cm , 4 cm , 4 cm D. 8 cm , 8 cm , 3 cm
284	In the equilateral triangle the side lengths are ______ A. 4 , 5 , 3 cm B. 4 , 4 , 5 cm C. 4 , 4 , 4 cm D. 3 , 5 , 6 cm
285	The triangle whose side lengths are ______ is isosceles triangle. A. 4 , 5 , 3 cm B. 4 , 4 , 5 cm C. 3 , 5 , 6 cm D. 2 , 3 , 4 cm
286	In the triangle ABC , AB = BC = 5 cm. , AC = 3 cm. , then the triangle is ______ A. equilateral. B. isosceles. C. scalene.
287	If AB = BC = AC , then the triangle ABC is ______ triangle. A. Equilateral B. Isosceles C. Scalene
288	The triangle whose side lengths are ______ is an isosceles triangle. A. 7 cm , 7 cm , 7 cm B. 5 cm , 7 cm , 5 cm C. 4 cm , 5 cm , 3 cm D. 8 cm , 6 cm , 9 cm
289	The triangle whose side lengths are 8 cm, 6 cm and ____ cm is called scalene triangle A. 8 B. 6 C. 7
290	In the triangle ABC , AB = BC = 5 cm. , AC = 3 cm. , then the triangle is ______ A. equilateral. B. isosceles. C. scalene.
291	The triangle whose all sides are different in lengths is called ________ A. Scalene B. Isosceles C. Equilateral

Coordinate plane and ordered pairs

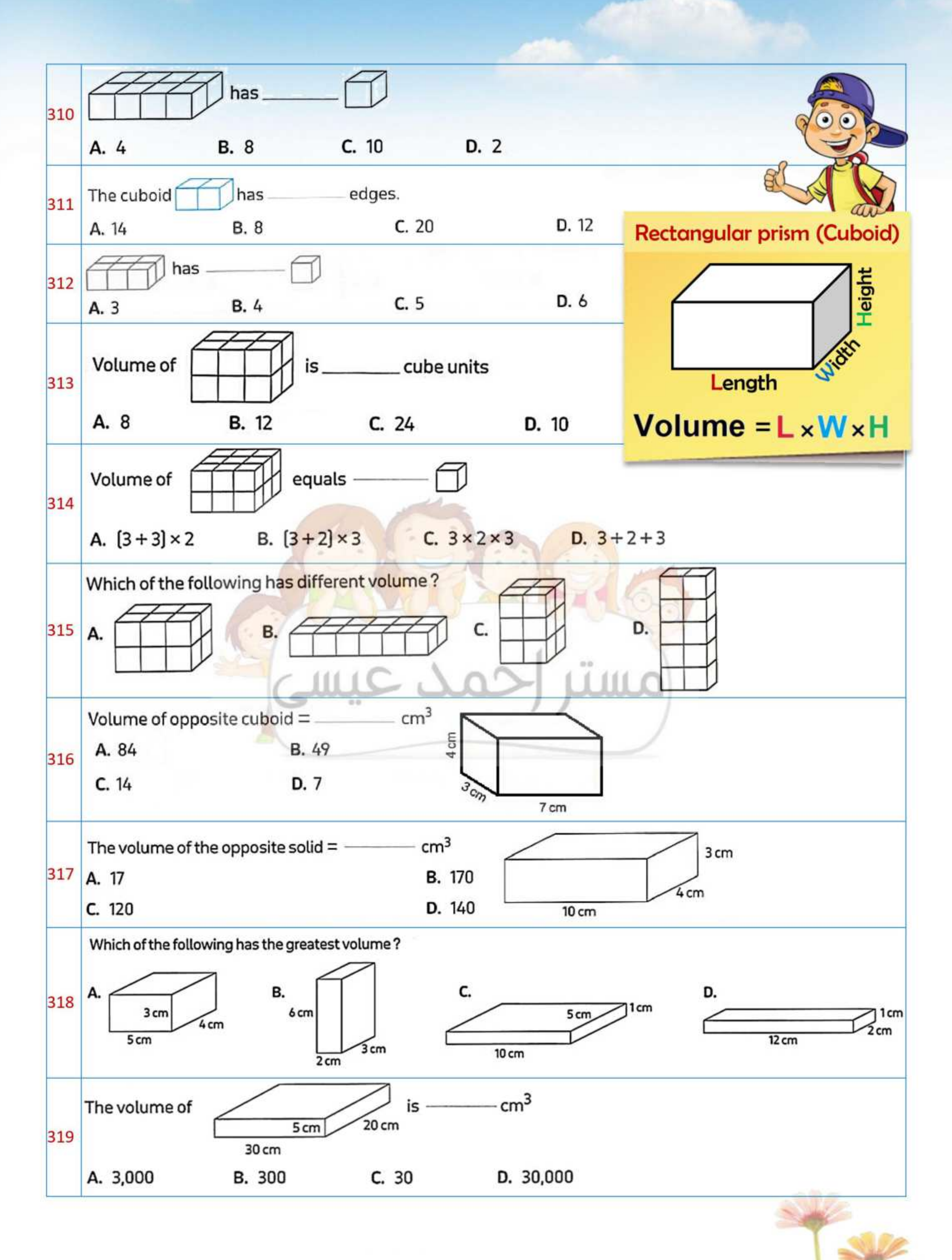
Choose	
292	The ______ is called the origin point. A. (1 , 0) B. (0 , 1) C. (1 , 1) D. (0 , 0)
293	The X-coordinate of the origin point is ______ A. 0 B. 1 C. 2 D. 3
294	The X-coordinate in ordered pair (3 , 2) is ______ A. 3 B. 2 C. 5 D. 6
295	Which of the following points located on Y-axis ? A. (1 , 0) B. (0 , 1) C. (1 , 1) D. (3 , 0)

No.	Question
296	The point (0 , 3) lies on __________ **A.** X-axis **B.** Y-axis **C.** Origin point
297	The point (5 , 0) lies on __________ **A.** X-axis **B.** Y-axis **C.** Origin point
298	The X-coordinate of (2 , 5) is .... **A.** 2 **B.** 5 **C.** 10 **D.** 0
299	The y-coordinate in the orderd pair (1 , 8) is ______ **A.** 1 **B.** 8 **C.** 1 + 8 **D.** 8 – 1
300	The y-coordinate of (0 , 7) is ______ **A.** 0 **B.** 7 **C.** 70 **D.** 1
301	The origin point is ______ **A.** (1 , 0) **B.** (0 , 1) **C.** (0 , 0) **D.** (1 , 1)
302	The point ______ lies on X-axis. **A.** (0 , 5) **B.** (1 , 5) **C.** (5 , 1) **D.** (5 , 0)
303	Which of the following points located on y-axis ? **A.** (1 , 0) **B.** (0 , 1) **C.** (1 , 1) **D.** (7 , 0)

The volume



Choose	
304	Number of horizontal layers of [figure] is ______ **A.** 4 **B.** 2 **C.** 3 **D.** 24
305	The cuboid has 6 horizontal layers and 2 cube units in each layer , then its volume = ____ cube units **A.** 8 **B.** 12 **C.** 4 **D.** 3
306	A cuboid has 4 horizontal layers and 5 cube units in each layer , then its volume = _____ cube units. **A.** 9 **B.** $\frac{5}{4}$ **C.** $\frac{4}{5}$ **D.** 20
307	If number of vertical layers in a cuboid is 4 layers and each layer has 10 cube units, then its volume = ______ cube units. **A.** 10 + 4 **B.** 10 – 4 **C.** 10 ÷ 4 **D.** 10 × 4
308	Number of horizontal layers in [figure] is ______ layers. **A.** 4 **B.** 3 **C.** 2 **D.** 1
309	[figure] has ______ [figure] **A.** 4 **B.** 7 **C.** 11 **D.** 12



310. [figure] has ______ [cube]
A. 4 B. 8 C. 10 D. 2

311. The cuboid [figure] has ______ edges.
A. 14 B. 8 C. 20 D. 12

312. [figure] has ______ [cube]
A. 3 B. 4 C. 5 D. 6

313. Volume of [figure] is ______ cube units
A. 8 B. 12 C. 24 D. 10

314. Volume of [figure] equals ______ [cube]
A. $(3+3)\times 2$ B. $(3+2)\times 3$ C. $3\times 2\times 3$ D. $3+2+3$

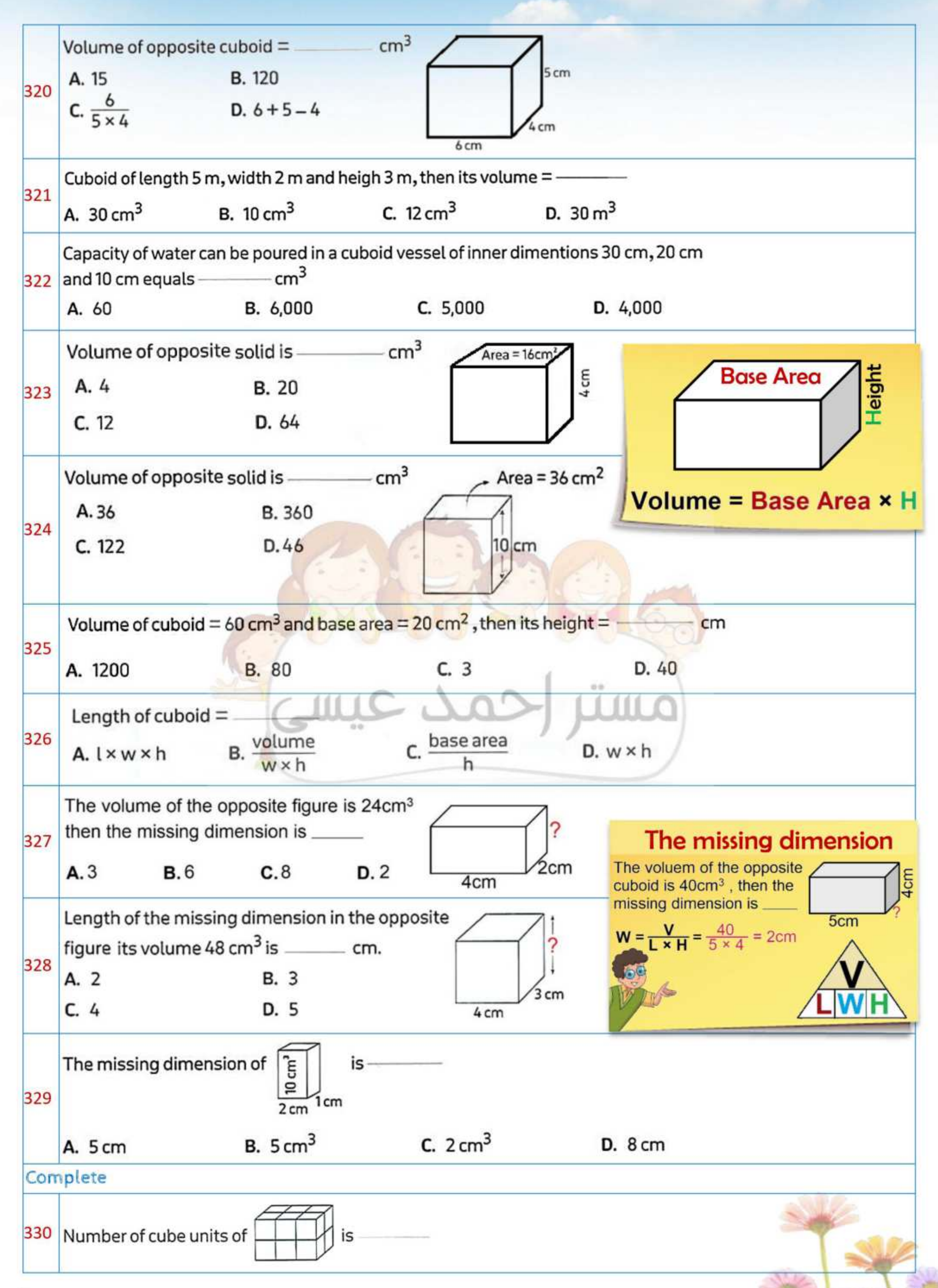
315. Which of the following has different volume?
A. B. C. D.

316. Volume of opposite cuboid = ______ cm^3
A. 84 B. 49
C. 14 D. 7

317. The volume of the opposite solid = ______ cm^3
A. 17 B. 170
C. 120 D. 140

318. Which of the following has the greatest volume?
A. B. C. D.

319. The volume of [figure] is ______ cm^3
A. 3,000 B. 300 C. 30 D. 30,000



320 Volume of opposite cuboid = ______ cm^3

A. 15 B. 120 C. $\frac{6}{5 \times 4}$ D. $6 + 5 - 4$

321 Cuboid of length 5 m, width 2 m and heigh 3 m, then its volume = ______

A. 30 cm^3 B. 10 cm^3 C. 12 cm^3 D. 30 m^3

322 Capacity of water can be poured in a cuboid vessel of inner dimentions 30 cm, 20 cm and 10 cm equals ______ cm^3

A. 60 B. 6,000 C. 5,000 D. 4,000

323 Volume of opposite solid is ______ cm^3

A. 4 B. 20 C. 12 D. 64

324 Volume of opposite solid is ______ cm^3

A. 36 B. 360 C. 122 D. 46

325 Volume of cuboid = 60 cm^3 and base area = 20 cm^2, then its height = ______ cm

A. 1200 B. 80 C. 3 D. 40

326 Length of cuboid = ______

A. $l \times w \times h$ B. $\frac{volume}{w \times h}$ C. $\frac{base\ area}{h}$ D. $w \times h$

327 The volume of the opposite figure is 24cm³ then the missing dimension is ______

A. 3 B. 6 C. 8 D. 2

328 Length of the missing dimension in the opposite figure its volume 48 cm^3 is ______ cm.

A. 2 B. 3 C. 4 D. 5

329 The missing dimension of [figure] is ______

A. 5 cm B. 5 cm^3 C. 2 cm^3 D. 8 cm

Complete

330 Number of cube units of [figure] is ______

331	Rectangular prism has 2 horizontal layers and each layer has 6 cube units , then its volume = _____cube units .
332	Volume of cuboid = _______________ × Height
333	Cuboid of base area 16 cm^2 and heigh 3 cm , then its volume = ________ cm^3
334	Volume of cuboid = ______ × ______ × ______
335	Volume of cuboid is 40 cm^3 , its length 5 cm and width 4 cm, then its height = ______ cm

Converting time

1 hour = 60 minutes

$\frac{1}{4}$ hour = 15 minutes

$\frac{1}{3}$ hour = 20 minutes

$\frac{1}{2}$ hour = 30 minutes

Choose

No.	Question	A	B	C	D
336	2 hours = ________ minutes	A. 90	B. 120	C. 20	D. 130
337	3 hours = ________ minutes	A. 60	B. 72	C. 48	D. 180
338	$1\frac{1}{4}$ hour = ________ minutes	A. 90	B. 135	C. 80	D. 75
339	$1\frac{1}{3}$ hours = ________ minutes	A. 80	B. 60	C. 120	D. 140
340	$1\frac{1}{2}$ hour = ________ minutes	A. 90	B. 120	C. 80	D. 150
341	1 minute = ________ seconds	A. 90	B. 20	C. 30	D. 60
342	90 seconds = ________ minutes	A. $\frac{1}{2}$	B. $1\frac{1}{4}$	C. 2	D. $1\frac{1}{2}$
343	120 seconds = ________ minutes	A. $\frac{1}{2}$	B. 2	C. 1	D. $2\frac{1}{4}$
344	150 minutes = ________ hours and________minutes	A. 1 , 30	B. 1 , 50	C. 3 , 30	D. 2 , 30
345	90 minutes = ________ hours and________minutes	A. 3 , 30	B. 1 , 50	C. 1 , 30	D. 2 , 30
346	$2\frac{1}{4}$ hour = ________ minutes	A. 120	B. 140	C. 80	D. 135
347	1 day = ________ hours	A. 28	B. 48	C. 24	D. 72
348	$1\frac{1}{2}$ day = ________ hours	A. $\frac{2}{3}$	B. 24	C. 36	D. $\frac{3}{2}$
349	1 year = ________ months	A. 6	B. 12	C. 10	D. 60
350	2 years = ________ months	A. 42	B. 48	C. 24	D. 12

351	$1\frac{1}{2}$ year = ________ months **A.** 18 **B.** 6 **C.** 24 **D.** 12
352	$\frac{1}{4}$ year = ________ months. **A.** 3 **B.** 4 **C.** 6 **D.** 12
353	30 months = ________ years + ________ months **A.** 1 , 6 **B.** 2 , 6 **C.** 1 , 10 **D.** 2 , 4
Complete	
354	$\frac{2}{3}$ minute = ________ seconds
355	150 seconds = ________ minutes
356	80 minutes = ________ hour
357	$7\frac{1}{10}$ minutes = ________ minutes and ________ seconds
358	$6\frac{1}{2}$ years = ________ years and ________ months
359	$4\frac{3}{4}$ hours = ________ hours and ________ minutes
360	75 seconds = ________ minute



Final revision

A	Choose the correct answer :
361	The mixed number $4\frac{1}{3}$ can be regrouped as ________ A. $\frac{13}{4}$ B. $3\frac{1}{4}$ C. $3\frac{4}{3}$ D. $4+\frac{1}{3}$
362	$\frac{3}{4}+\frac{1}{2}=$ ________ **A.** $\frac{4}{6}$ **B.** $\frac{3}{8}$ **C.** $\frac{1}{4}$ **D.** $1\frac{1}{4}$
363	$\frac{19}{5}$ is equivalent to ________ **A.** $3\frac{3}{5}$ **B.** $4\frac{1}{5}$ **C.** $3\frac{5}{5}$ **D.** $3\frac{4}{5}$
364	$2\frac{1}{3}$ hour = ________ minutes **A.** 120 **B.** 140 **C.** 80 **D.** 135
365	If $2\frac{1}{4}-n=\frac{3}{4}$, then n = ________ **A.** 2 **B.** $\frac{3}{4}$ **C.** 3 **D.** $1\frac{1}{2}$
366	$\frac{3}{4}-\frac{5}{8}=$ ________ . **A.** $\frac{1}{4}$ **B.** $\frac{1}{8}$ **C.** $\frac{3}{8}$ **D.** $\frac{5}{8}$
367	Which of the following points located on y-axis ? **A.** (1 , 0) **B.** (0 , 1) **C.** (1 , 1) **D.** (3 , 0)

368 The triangle of side lengths are 5 cm , 6 cm , 7 cm is called ______ triangle.

A. Equilateral B. Isosceles C. Scalene

369 The cylinder has ______ bases.

A. zero B. 1 C. 2 D. 3

370 $2\frac{3}{5} + ______ = 3\frac{1}{4}$

A. $\frac{13}{20}$ B. $1\frac{4}{5}$ C. $1\frac{2}{5}$ D. $1\frac{1}{4}$

371 The cube has ______ faces.

A. 4 B. 6 C. 8 D. 12

372 If $\frac{1}{5} \div a = \frac{1}{10}$, then a = ______

A. $\frac{1}{2}$ B. 5 C. $\frac{1}{5}$ D. 2

373 The measure of each angle in square is ______

A. 45° B. 90° C. 100° D. 180°

374 + = ______

A. $\frac{1}{3} + \frac{1}{3}$ B. $\frac{1}{2} + \frac{1}{2}$ C. $\frac{1}{2} + \frac{1}{3}$ D. 3 + 2

375 $\frac{1}{5} \div 4 = ______$

A. $\frac{4}{5}$ B. $\frac{5}{4}$ C. 20 D. $\frac{1}{20}$

376 Number of faces of cube ◯ Number of faces of cuboid.

A. > B. < C. =

377 If $\frac{1}{2} + a = \frac{7}{8}$, then a = ______

A. $\frac{6}{6}$ B. $\frac{3}{8}$ C. $\frac{8}{10}$ D. $1\frac{1}{8}$

378 The pentagon has ______ sides.

A. 3 B. 4 C. 5 D. 6

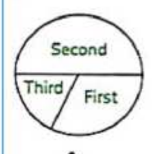
379 90 seconds = ______ minutes.

A. 90 B. $1\frac{1}{4}$ C. $1\frac{1}{2}$ D. $1\frac{1}{3}$

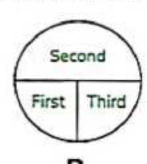
380	The fraction $\frac{10}{15}$ is equivalent to ______ A. $\frac{4}{6}$ B. $\frac{2}{5}$ C. $1\frac{1}{2}$ D. $\frac{20}{33}$
381	The ______ is a polygon with 6 sides. A. quadrilateral B. pentagon C. hexagon D. square
382	Which of the following is equal to $4 \times 2\frac{1}{2}$? A. $8\frac{1}{2}$ B. 4 C. $\frac{10}{2}$ D. 10
383	$\frac{8}{11} \times 2.5 =$ ______ A. $\frac{16}{11}$ B. $1\frac{9}{11}$ C. $\frac{11}{20}$ D. $1\frac{2}{11}$
384	The triangle whose side lengths are ______ is an equilateral triangle. A. 7 cm , 6 cm , 5 cm B. 5 cm , 7 cm , 5 cm C. 4 cm , 4 cm , 4 cm D. 8 cm , 8 cm , 3 cm
385	The following table shows the fractions of chicken production for three farms during October :

The farm	First	Second	Third
The fractions	$\frac{1}{4}$	$\frac{1}{2}$	______

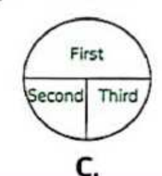
, then the representation of these data by the pie chart is ______



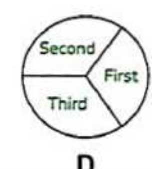
A.



B.



C.



D.

386	The ______ has five vertices and five faces. A. cone B. cuboid C. square pyramid D. sphere
387	If $\frac{5}{8} = \frac{x}{40}$, then $x =$ ______ A. 37 B. 25 C. 40 D. 5×8
388	The sphere has ______ edges. A. 3 B. 2 C. 1 D. zero
389	If $3\frac{5}{m}$ is about 4 , then m may be ______ A. 6 B. 8 C. 10 D. 12
390	$1\frac{5}{6} \times \frac{5}{6}$ is ______ $1\frac{5}{6}$ A. less than B. equal to C. greater than

391 $\frac{1}{3} \div 3 \;\square\; \frac{1}{3} - \frac{2}{9}$

A. < B. = C. >

392 Which of the following is equivalent to $\frac{3}{7}$?

A. $2\frac{1}{3}$ B. $\frac{13}{17}$ C. $\frac{9}{21}$ D. $\frac{6}{10}$

393 The square pyramid has ______ triangle faces.

A. 4 B. 5 C. 7 D. 8

394 If $5\frac{7}{f}$ is slightly greater than $5\frac{1}{2}$, then f may be ______

A. 13 B. 7 C. 5 D. 57

395 The volume of cuboid of dimensions 17 cm, 13 cm and 11 cm equal ______ cm^3

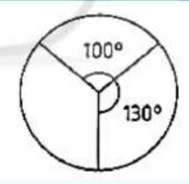
A. 2341 B. 2431 C. 2314 D. 2341

396 $12 \div 8 = 1\frac{1}{__}$

A. 2 B. 3 C. 4 D. 5



397 In the opposite figure, the measure of the central angle of the colored circular sector equals ______ °



A. 360 B. 100
C. 130 D. 230

398 $\frac{1}{4}$ year = ______ months.

A. 3 B. 4 C. 6 D. 12

399 The cuboid has 6 horizontal layers and 2 cube units in each layer, then its volume = ______ cube units

A. 8 B. 12 C. 4 D. 3

400 $\frac{2}{3} \times \frac{3}{8} \times \frac{8}{9} =$ ______

A. $\frac{1}{3}$ B. $\frac{2}{9}$ C. $\frac{13}{20}$ D. $\frac{2}{17}$

401 The ______ is called the origin point.

A. (1, 0) B. (0, 1) C. (1, 1) D. (0, 0)

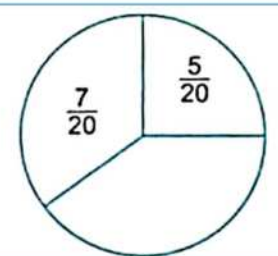
402 $3\frac{1}{2} - 1\frac{2}{3} =$ ______

A. $1\frac{5}{6}$ B. $6\frac{1}{5}$ C. $5\frac{1}{6}$ D. $1\frac{6}{5}$



403 120 seconds = ______ minutes

A. 1 B. 2 C. 3 D. 4

404	Which of the following points located on y-axis ? A. (1 , 0) B. (0 , 1) C. (1 , 1) D. (7 , 0)
405	Area of rectangle = ______ A. L + W B. L × W C. L ÷ W D. [L + W] × 2
406	If $8\frac{3}{C}$ is slightly less than $8\frac{1}{2}$, then C may be ______ A. 7 B. 4 C. 2 D. 15
407	$\frac{1}{5} \div 4 =$ ______ A. $\frac{4}{5}$ B. $\frac{5}{4}$ C. 20 D. $\frac{1}{20}$
408	The number of thirds in one is ______ A. 1 B. 2 C. 3 D. $\frac{1}{3}$
409	$5\frac{1}{6} + 2\frac{4}{5}$ is estimate as ______ A. 5 + 3 B. 6 + 3 C. 5 + 2 D. 6 + 4
410	The triangle whose side lengths are ______ is isosceles triangle. A. 4 , 5 , 3 cm B. 4 , 4 , 5 cm C. 3 , 5 , 6 cm D. 2 , 3 , 4 cm
B	Complete each of the following
411	______ $+ 1\frac{5}{7} = 3\frac{5}{14}$
412	$1\frac{1}{5} \times$ ______ $= 1$
413	In the opposite figure : The fraction of the shaded pie chart = ______ 
414	$5 - \frac{1}{2} - \frac{1}{3} =$ ______
415	$\frac{1}{4}$ year = ______ months.
416	$7\frac{1}{2} \times \frac{1}{15} =$ ______
417	On the grid , the x-coordinate of (5 , 7) is ______
418	The LCM of the denominators of the fractions $\frac{1}{3}$ and $\frac{5}{12}$ is ______
419	The shape which has 0 faces , 0 edges and 0 vertices is ______

420	If $x + 5\frac{5}{6} = 9\frac{1}{12}$, then $x =$ ______
421	The cuboid [cuboid figure] has ______ [unit cube]
422	Height of cuboid = ____________ ÷ __________
423	$\frac{10}{3} \times \frac{3}{10} =$ ______
424	$\frac{1}{2} \times$ ______ $= \frac{3}{8}$
425	$\frac{2}{5} - \frac{1}{4} =$ ______
426	If $5 \div a = 10$, then a = ______
427	If $2\frac{1}{7} = \frac{x}{7}$, then $x =$ ______
428	$\frac{1}{2} \times$ ______ $= \frac{3}{8}$
429	$2\frac{1}{4} + 2\frac{1}{4} =$ ______
430	In $\triangle ABC$, $AB = BC = 7$ cm and $AC = 4$ cm, then the triangle is ______
431	$\frac{1}{2} \times \frac{3}{5} =$ ______
432	Volume of cuboid = ______ × height.
433	$3\frac{1}{2}$ years = ______ years and ______ months
434	Simplest form of $\frac{16}{24}$ is ______
435	$1\frac{1}{2} \times 2\frac{2}{3} =$ ______
436	$7\frac{3}{8} +$ ______ $= 10\frac{1}{4}$
C	Solving story problems
437	Fatma feeds her cat $\frac{1}{8}$ of a kilogram of cat food each day. How many days will 4 kg of cat food last ?
438	Jomana likes chocolate. One day she bought a chocolate and ate $\frac{2}{9}$ of it in the morning and $\frac{2}{3}$ in the evening. **How much part of the chocolate has she eaten ?**
439	Hany collected $5\frac{1}{4}$ kilograms of honey. He gave his brother $2\frac{3}{7}$ kilograms of them. **How many kilograms are left ?**



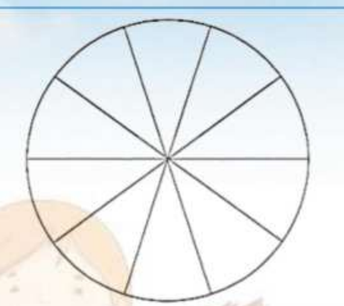
440	If the price of each book is $10\frac{1}{2}$ L.E **Find the price of 8 books.**
441	The price of each pen is $2\frac{1}{2}$ L.E. **Find the price of 6 pens.**
442	The price of 9 notebooks is 55 L.E. **Find the price of each book .**
443	Nermin took $2\frac{1}{3}$ hours to paint a table and $1\frac{1}{4}$ hours to paint a chair. **How much time did she take in all ?**
444	**How many thirds are in the number 7 ?**
445	How many fourths in the number 3 ?
446	How many $\frac{1}{4}$ cup are there in 7 cups of chocolate ?
447	How many sevenths are in the number 5 ?
448	If the price of 9 pens is 77 L.E. **Find the price of each pen.**
449	$\frac{3}{4}$ of the teachers staff are male. How many of the staff are female ?
450	Martin spends $\frac{1}{3}$ of his money to buy food and $\frac{1}{2}$ of it to buy toys. **What fraction does the left money represent ?**
451	Youssef's dad said he will give him $7\frac{1}{2}$ L.E if he works one hour. **How much will he give him for 3 hours and 15 minutes ?**
452	Marwan studied math for $2\frac{1}{2}$ hours and science for 90 minutes. **How many hours did Marwan study in all ?**

453	A juice can is in the shape of cuboid , its base is square-shaped of side length 5 cm. and its height is 10 cm **Calculate the volume of juice can.**
454	Ahmed had $10\frac{1}{2}$ L.E. in his pocket and $15\frac{3}{4}$ L.E. in his bank. **How much money did he have ?**
455	Victor has 7 liters of mango juice. If he drinks $\frac{1}{4}$ Litre of juice each day. How many days will it take him to finish all the juice ?
456	If the price of 8 pencils is 60 pounds. **Find the price of each pencil.**
457	Karim walked $2\frac{1}{5}$ km and Sameh walked $1\frac{1}{3}$ km more. **What distance that Sameh walked ?**
458	A cuboid whose volume is 8000 cm^3 and the length of its base is 25 cm and the width of its base is 16 cm **Find the height of the cuboid.**
459	A house has a door that is $1\frac{1}{2}$ m wide and $2\frac{1}{2}$ m long. What is the area of the door in square meters ?
460	Nagwa bought $2\frac{2}{3}$ liters of mango juice for $8\frac{3}{8}$ L.E. for each liter. **How much money did she pay ?**
461	Youssef walked $1\frac{1}{2}$ km , Ahmed walked $\frac{1}{3}$ km more than Youssef. **How many km did Ahmed walk ?**
462	Sohila likes chocolate. One day , she bought a chocolate and ate $\frac{1}{3}$ of it. Next day. she ate $\frac{1}{5}$ of it. Find the fraction of the left part.
463	**The opposite figure shows the percentages of sales of different types of books. Complete :** 1. The sales fraction of science books is .... 2. The least sales fraction is in .... French 0.2 Science .... English 0.15 Maths 0.25 Social studies 0.1

464	The following table shows the fractions of the number of hours that Marwa studied in different subjects in a week.

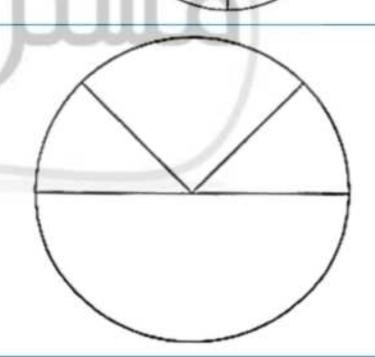
Subject	Arabic	Maths	Science	English
Fraction	$\frac{1}{10}$	$\frac{2}{5}$	$\frac{1}{5}$	$\frac{3}{10}$

Represent these data by the opposite pie chart.



465 The following table shows the number of students who practice sports. Represent these data using the pie chart on the opposite figure.

Sport	Football	Basketball	Volleyball
Number of students	20	10	10



466 An employee spends his salary as follows.

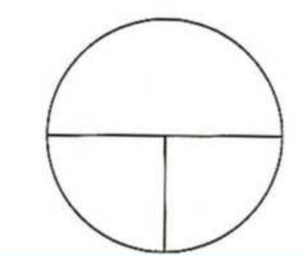
L.E. 200 for clothes.

L.E. 800 for food.

L.E. 400 for transportation and medicine.

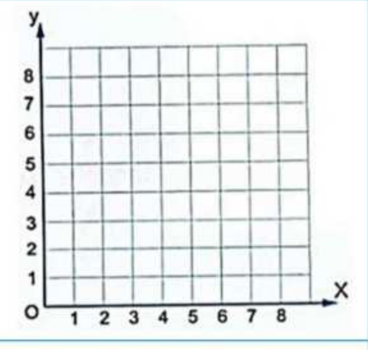
L.E. 200 for renting an apartment.

Graph that data on the opposite pie chart.



467 The following table shows the number of students who practice sports. Represent these data using the pie chart on the opposite figure.

Sport	Football	Basketball	Volleyball
Number of students	20	10	10



468 In the opposite coordinate plane :

1. Graph the figure ABCD where A (2 , 8) , B (3 , 4) , C (8 , 4) and D (7 , 8)

2. What is the length of $\overline{AD}$?

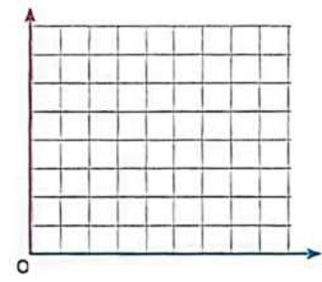
469 a. Plot the points on the coordinate grid.

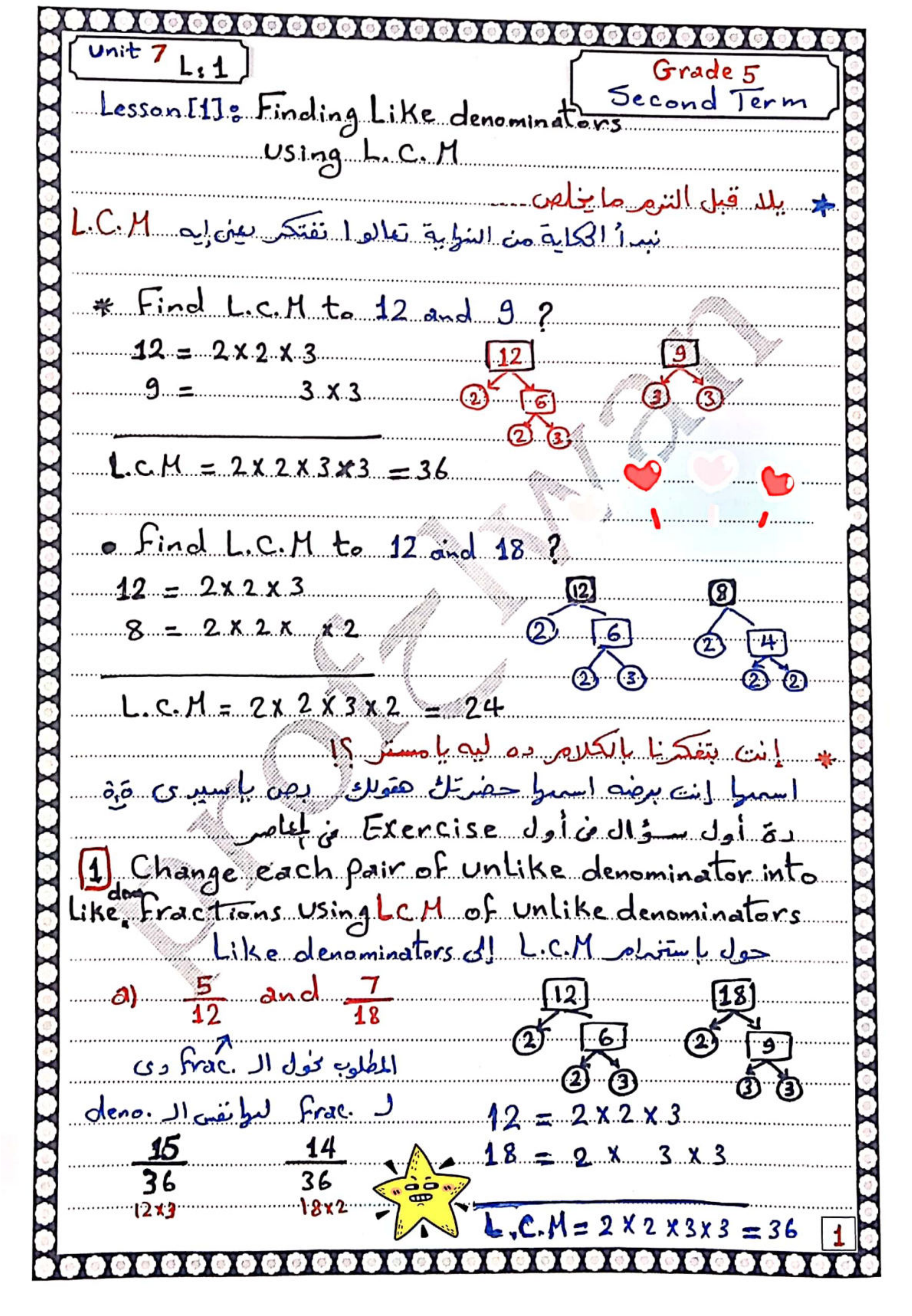
A (3 , 2) B (3 , 5)

C (6 , 5) D (6 , 2)

b. Connect the points in order.

What polygon did you create ?





Unit 7 L: 1

Grade 5
Second Term

Lesson [1]: Finding Like denominators using L.C.M

* يلا قبل النرم ما يخلص....

نبدأ الحكاية من البداية تعالوا نفتكر يعني إيه L.C.M

* Find L.C.M to 12 and 9 ?

12 = 2 x 2 x 3
9 = 3 x 3

L.C.M = 2 x 2 x 3 x 3 = 36

• Find L.C.M to 12 and 18 ?

12 = 2 x 2 x 3
8 = 2 x 2 x 2

L.C.M = 2 x 2 x 3 x 2 = 24

* إنت بتفكرنا بالكلام ده ليه يا مستر؟!

اسمعوا إنت برضه اسمعوا حضرتك هقولك بص يا سيدي ق
دة أول سؤال من أول Exercise من الخاص

1) Change each pair of unlike denominator into Like deno. fractions using L.C.M of unlike denominators

حول باستخدام L.C.M إلى Like denominators

a) $\frac{5}{12}$ and $\frac{7}{18}$

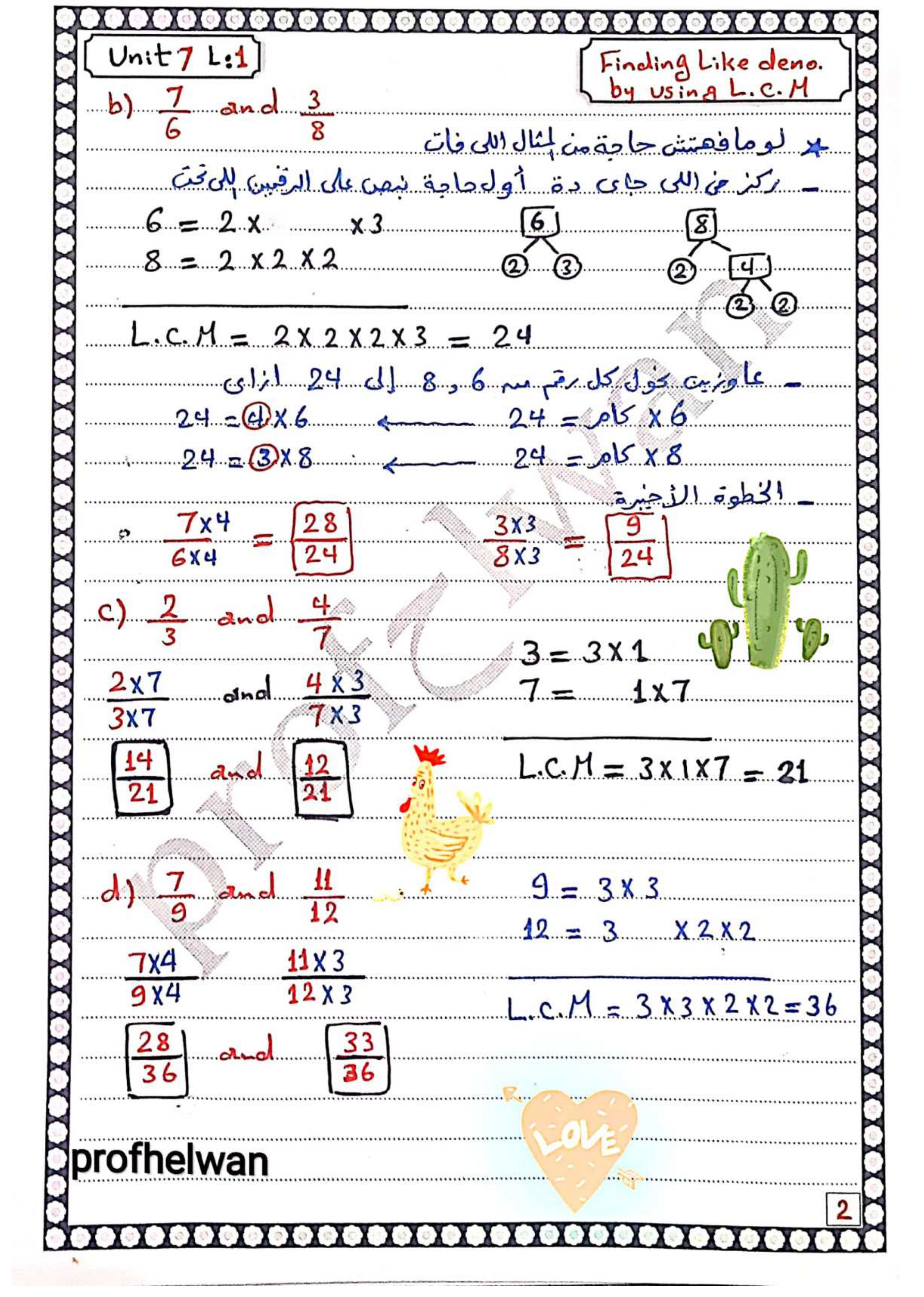
المطلوب تحول الـ frac. دي

لـ frac. لها نفس الـ deno.

12 = 2 x 2 x 3
18 = 2 x 3 x 3

L.C.M = 2 x 2 x 3 x 3 = 36

$\frac{15}{36}$ (12 x 3) $\frac{14}{36}$ (18 x 2)



Unit 7 L:1

Finding Like deno. by using L.C.M

b) $\frac{7}{6}$ and $\frac{3}{8}$

★ لو مافهمتش حاجة من المثال اللى فات

- ركز فى اللى جاى دة أول حاجة نبص على الرقمين اللى تحت

$6 = 2 \times \quad \times 3$

$8 = 2 \times 2 \times 2$

6 → 2, 3

8 → 2, 4 → 2, 2

$L.C.M = 2 \times 2 \times 2 \times 3 = 24$

- عاوزين نحول كل رقم من 6 و 8 إلى 24 ازاى

24 = كام × 6 ⟶ $24 = (4) \times 6$

24 = كام × 8 ⟶ $24 = (3) \times 8$

- الخطوة الأخيرة

$\frac{7 \times 4}{6 \times 4} = \boxed{\frac{28}{24}}$ $\frac{3 \times 3}{8 \times 3} = \boxed{\frac{9}{24}}$

c) $\frac{2}{3}$ and $\frac{4}{7}$

$3 = 3 \times 1$

$7 = \quad 1 \times 7$

$L.C.M = 3 \times 1 \times 7 = 21$

$\frac{2 \times 7}{3 \times 7}$ and $\frac{4 \times 3}{7 \times 3}$

$\boxed{\frac{14}{21}}$ and $\boxed{\frac{12}{21}}$

d) $\frac{7}{9}$ and $\frac{11}{12}$

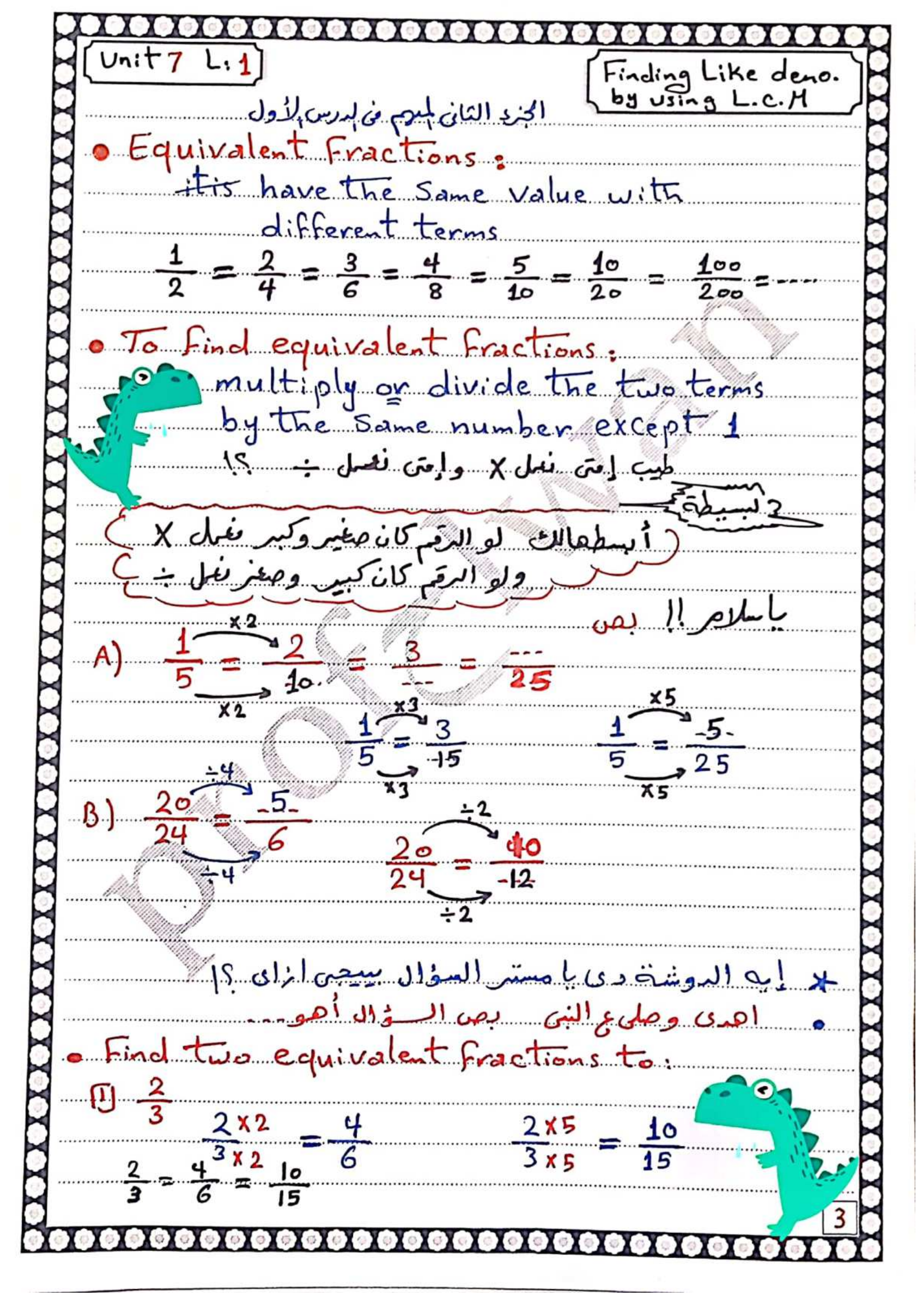
$9 = 3 \times 3$

$12 = 3 \quad \times 2 \times 2$

$L.C.M = 3 \times 3 \times 2 \times 2 = 36$

$\frac{7 \times 4}{9 \times 4}$ $\frac{11 \times 3}{12 \times 3}$

$\boxed{\frac{28}{36}}$ and $\boxed{\frac{33}{36}}$



Finding Like deno. by using L.C.M

الجزء الثاني المهم في الدرس الأول

- **Equivalent Fractions:**
  ~~it is~~ have the same value with different terms

$$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10} = \frac{10}{20} = \frac{100}{200} = \dots$$

- **To find equivalent fractions:**
  multiply or divide the two terms by the same number except 1

طيب إمتى نعمل X وإمتى نعمل ÷ ؟!

ع البسيطة

أبسطهالك لو الرقم كان صغير وكبر نعمل X
ولو الرقم كان كبير وصغر نعمل ÷

ياسلام !! بص

A) $\frac{1}{5} = \frac{2}{10} = \frac{3}{--} = \frac{--}{25}$ ($\times 2$)

$\frac{1}{5} = \frac{3}{15}$ ($\times 3$) $\qquad \frac{1}{5} = \frac{5}{25}$ ($\times 5$)

B) $\frac{20}{24} = \frac{5}{6}$ ($\div 4$) $\qquad \frac{20}{24} = \frac{10}{12}$ ($\div 2$)

✱ إيه الدوشة دي يا مستر السؤال بيجي ازاي ؟!

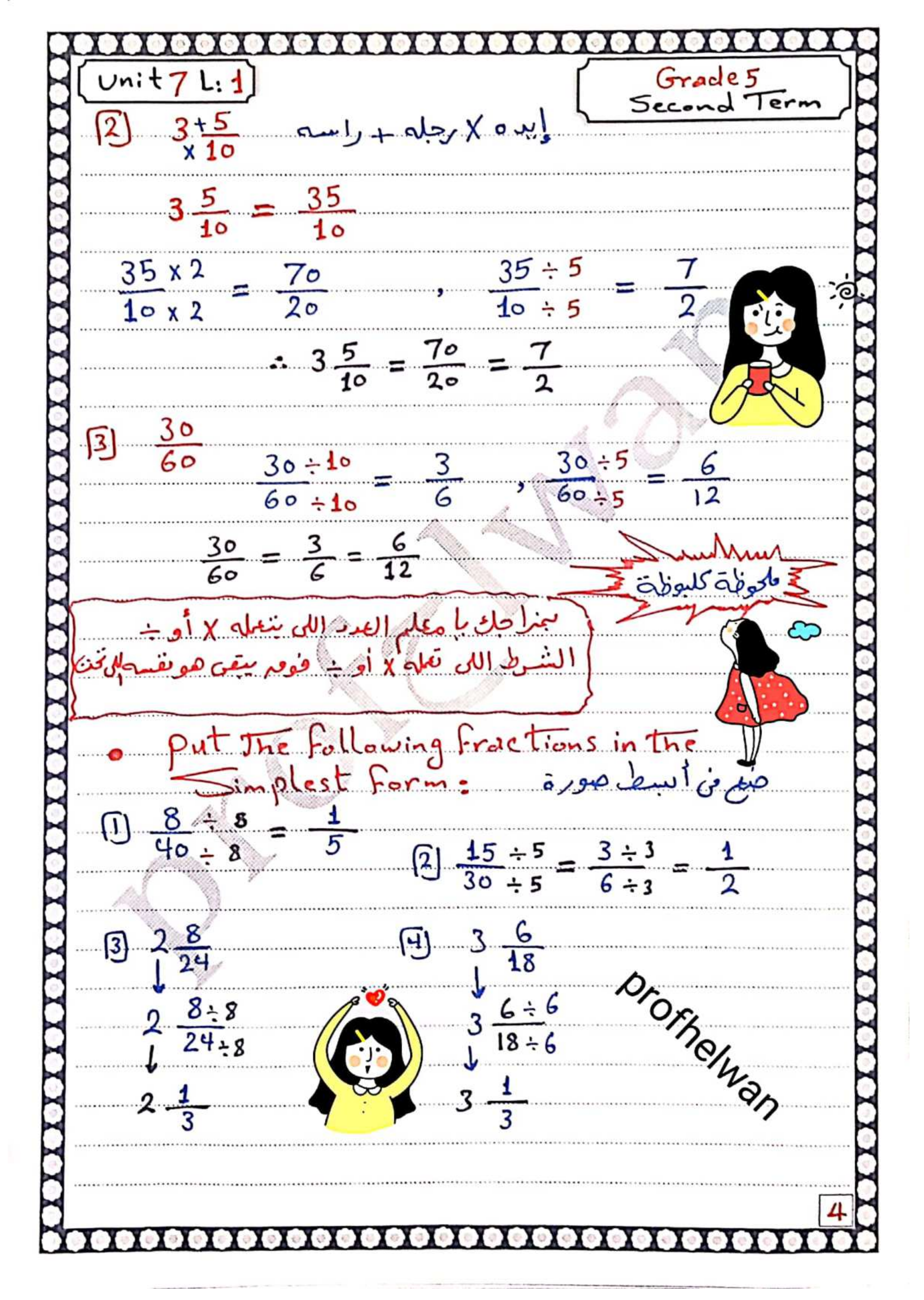
- اهدى وصلي ع النبي بص السؤال أهو...

- **Find two equivalent fractions to:**

1) $\frac{2}{3}$

$\frac{2 \times 2}{3 \times 2} = \frac{4}{6} \qquad \frac{2 \times 5}{3 \times 5} = \frac{10}{15}$

$\frac{2}{3} = \frac{4}{6} = \frac{10}{15}$



[2] $3\frac{5}{10}$ إيده X رجله + راسه

$$3\frac{5}{10} = \frac{35}{10}$$

$$\frac{35\times 2}{10\times 2} = \frac{70}{20} \quad , \quad \frac{35\div 5}{10\div 5} = \frac{7}{2}$$

$$\therefore 3\frac{5}{10} = \frac{70}{20} = \frac{7}{2}$$

[3] $\frac{30}{60}$

$$\frac{30\div 10}{60\div 10} = \frac{3}{6} \quad , \quad \frac{30\div 5}{60\div 5} = \frac{6}{12}$$

$$\frac{30}{60} = \frac{3}{6} = \frac{6}{12}$$

ملحوظة كلبوظة

بنفكرك يا معلم العدد اللي بنعمله X أو ÷
الشرط اللي تعمله X أو ÷ فوقه يبقى هو نفسه اللي تحت

- Put the following fractions in the Simplest form: ضع في أبسط صورة

[1] $\frac{8\div 8}{40\div 8} = \frac{1}{5}$

[2] $\frac{15\div 5}{30\div 5} = \frac{3\div 3}{6\div 3} = \frac{1}{2}$

[3] $2\frac{8}{24}$ → $2\frac{8\div 8}{24\div 8}$ → $2\frac{1}{3}$

[4] $3\frac{6}{18}$ → $3\frac{6\div 6}{18\div 6}$ → $3\frac{1}{3}$

Unit 7 L: 1

Homework

* Send to Prof *

(1) Complete the following :-

a) $\frac{3}{5} = \frac{9}{---}$ b) $\frac{7}{21} = \frac{1}{---}$ c) $\frac{5}{8} = \frac{---}{48}$

d) $\frac{2}{7} = \frac{6}{---}$ e) $\frac{4}{12} = \frac{---}{36}$ f) $\frac{3}{10} = \frac{---}{50}$

(2) put the following fractions in the Simplest form:

a) $\frac{4}{12}$ b) $\frac{50}{90}$ c) $\frac{8}{16}$

d) $\frac{24}{36}$ e) $3\frac{6}{18}$ f) $\frac{14}{35}$

(3) Find two equivalent Fractions to each fraction

a) $\frac{21}{27}$ b) $\frac{4}{5}$ c) $\frac{36}{48}$

d) $3\frac{3}{6}$ e) $\frac{35}{70}$ f) $\frac{1}{2}$

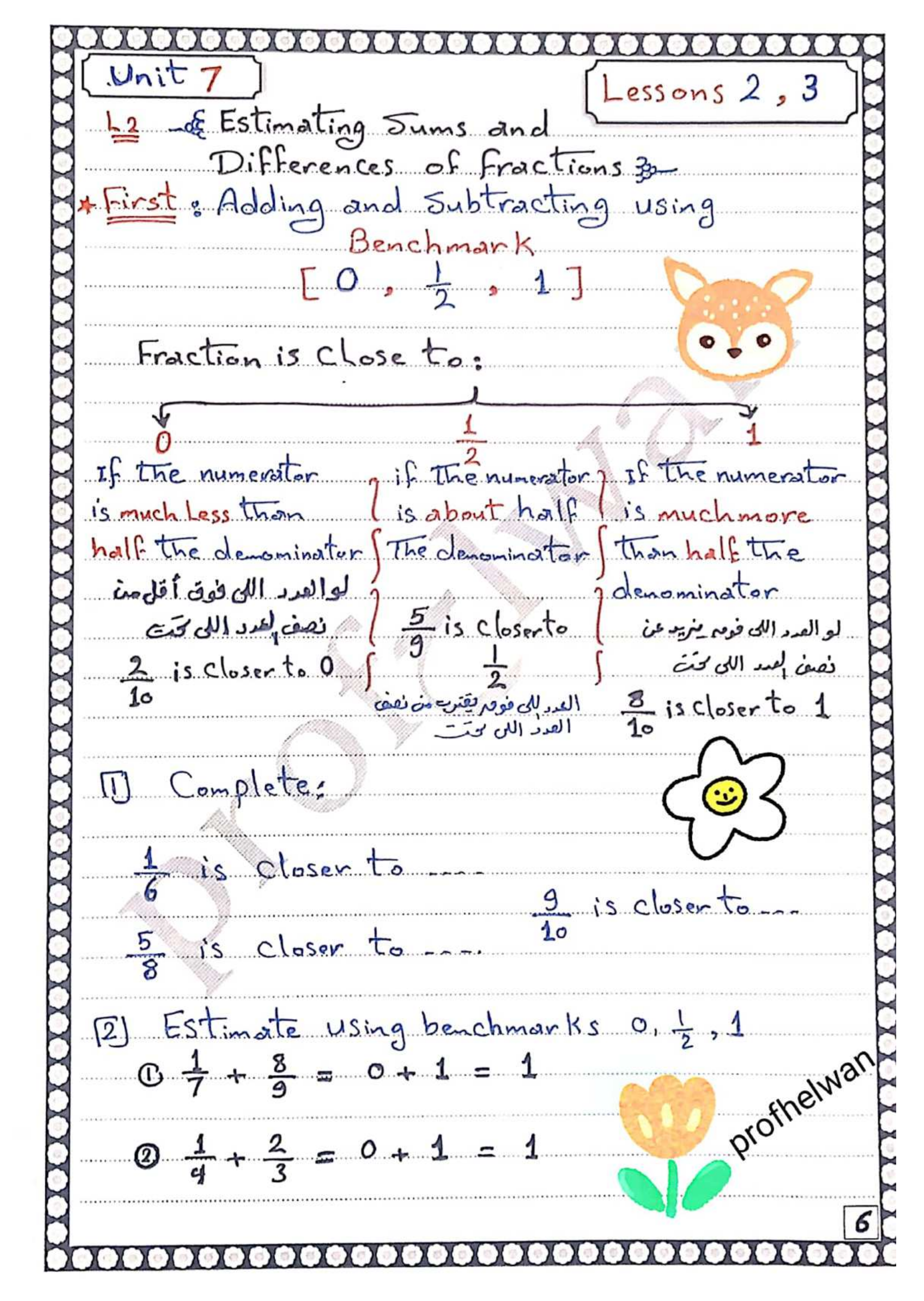
(4) Find the Smallest like denominators for the following fractions using L.C.M:

a) $\frac{5}{12}, \frac{3}{16}$ b) $\frac{4}{9}, \frac{2}{3}$

c) $\frac{5}{6}, \frac{3}{8}$ d) $\frac{3}{5}, \frac{2}{15}$

e) $\frac{2}{6}, \frac{4}{5}$ f) $\frac{3}{4}, \frac{5}{12}$

سلامو عليكو



Unit 7

Lessons 2 , 3

L2 Estimating Sums and Differences of fractions

★ First : Adding and Subtracting using Benchmark

$[0 , \frac{1}{2} , 1]$

Fraction is close to:

0	$\frac{1}{2}$	1
If the numerator is much less than half the denominator	if the numerator is about half the denominator	If the numerator is much more than half the denominator
لو العدد اللي فوق أقل من نصف العدد اللي تحت	$\frac{5}{9}$ is closer to $\frac{1}{2}$	لو العدد اللي فوقه يزيد عن نصف العدد اللي تحت
$\frac{2}{10}$ is closer to 0	العدد اللي فوقه يقترب من نصف العدد اللي تحت	$\frac{8}{10}$ is closer to 1

[1] Complete:

$\frac{1}{6}$ is closer to ....

$\frac{9}{10}$ is closer to ....

$\frac{5}{8}$ is closer to ....

[2] Estimate using benchmarks $0, \frac{1}{2}, 1$

① $\frac{1}{7} + \frac{8}{9} = 0 + 1 = 1$

② $\frac{1}{4} + \frac{2}{3} = 0 + 1 = 1$

③ $\frac{4}{9} + \frac{7}{8} = \frac{1}{2} + 1 = 1\frac{1}{2}$

④ $\frac{5}{6} - \frac{7}{12} = 1 - \frac{1}{2} = \frac{1}{2}$

⑤ $\frac{3}{4} - \frac{2}{3} = 1 - 1 = 0$

[3] صحح بأة للسؤال دة علشان هيعمل قلق

Indicate whether the given estimate is an overestimate or underestimate ?

* وضح ما إذا كان التقدير المحدد هو تقدير بقيمة أكبر أم تقدير بقيمة أقل ؟

a. $\frac{9}{10} + \frac{2}{5}$ is about $1\frac{1}{2}$ overestimate

ليه بأه إن شاء الله وليه مش underestimate

Estimation نوع التقدير	التقدير	القيمة الحقيقية	Fraction
over تقدير بقيمة أكبر	1	أقل من 1	$\frac{9}{10}$
over تقدير بقيمة أكبر	$\frac{1}{2}$	أقل من $\frac{1}{2}$	$\frac{2}{5}$

b. $\frac{3}{5} + \frac{6}{10}$ is about 1 Underestimate

($\frac{3}{5}$ → $\frac{1}{2}$ ، أكبر من $\frac{1}{2}$ ؛ $\frac{6}{10}$ → $\frac{1}{2}$ ، أكبر من $\frac{1}{2}$)

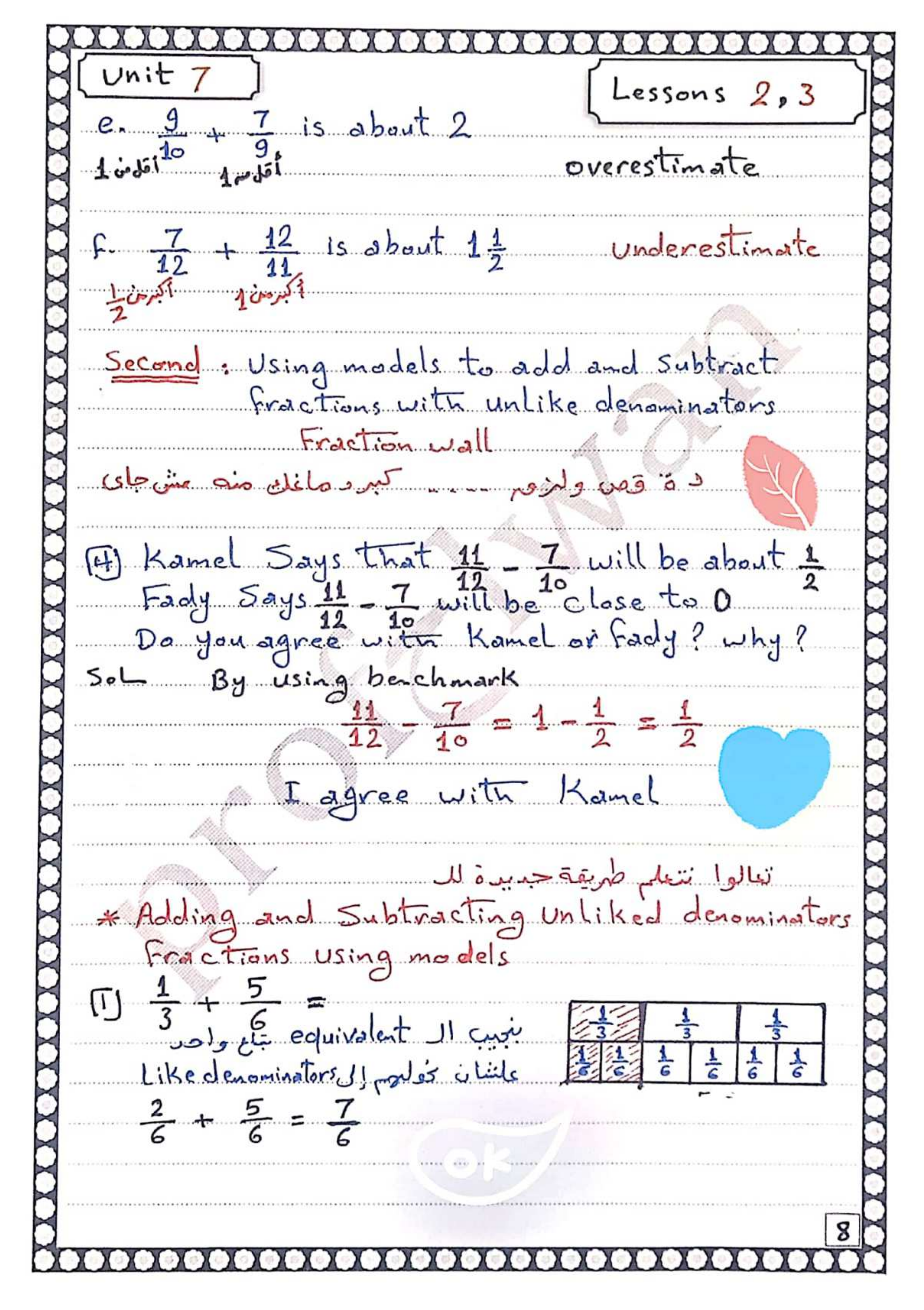
c. $\frac{1}{3} + \frac{5}{9}$ is about $\frac{1}{2}$ Underestimate

($\frac{1}{3}$ → 0 ، أكبر من 0 ؛ $\frac{5}{9}$ → $\frac{1}{2}$ ، أكبر من $\frac{1}{2}$)

بروف حلوان

d. $\frac{2}{5} + \frac{3}{7}$ is about 1 Overestimate

($\frac{2}{5}$ → $\frac{1}{2}$ ، أقل من $\frac{1}{2}$ ؛ $\frac{3}{7}$ → $\frac{1}{2}$ ، أقل من $\frac{1}{2}$)



e. $\frac{9}{10} + \frac{7}{9}$ is about 2 — overestimate

(أقل من 1) (أقل من 1)

f. $\frac{7}{12} + \frac{12}{11}$ is about $1\frac{1}{2}$ — underestimate

(أكبر من $\frac{1}{2}$) (أكبر من 1)

Second : Using models to add and subtract fractions with unlike denominators

Fraction wall

دة قص ولزق ...... كبر دماغك منه مش جاى

(4) Kamel Says that $\frac{11}{12} - \frac{7}{10}$ will be about $\frac{1}{2}$

Fady Says $\frac{11}{12} - \frac{7}{10}$ will be close to 0

Do you agree with Kamel or fady? why?

Sol By using benchmark

$$\frac{11}{12} - \frac{7}{10} = 1 - \frac{1}{2} = \frac{1}{2}$$

I agree with Kamel

تعالوا نتعلم طريقة جديدة لل

* Adding and Subtracting Unliked denominators fractions using models

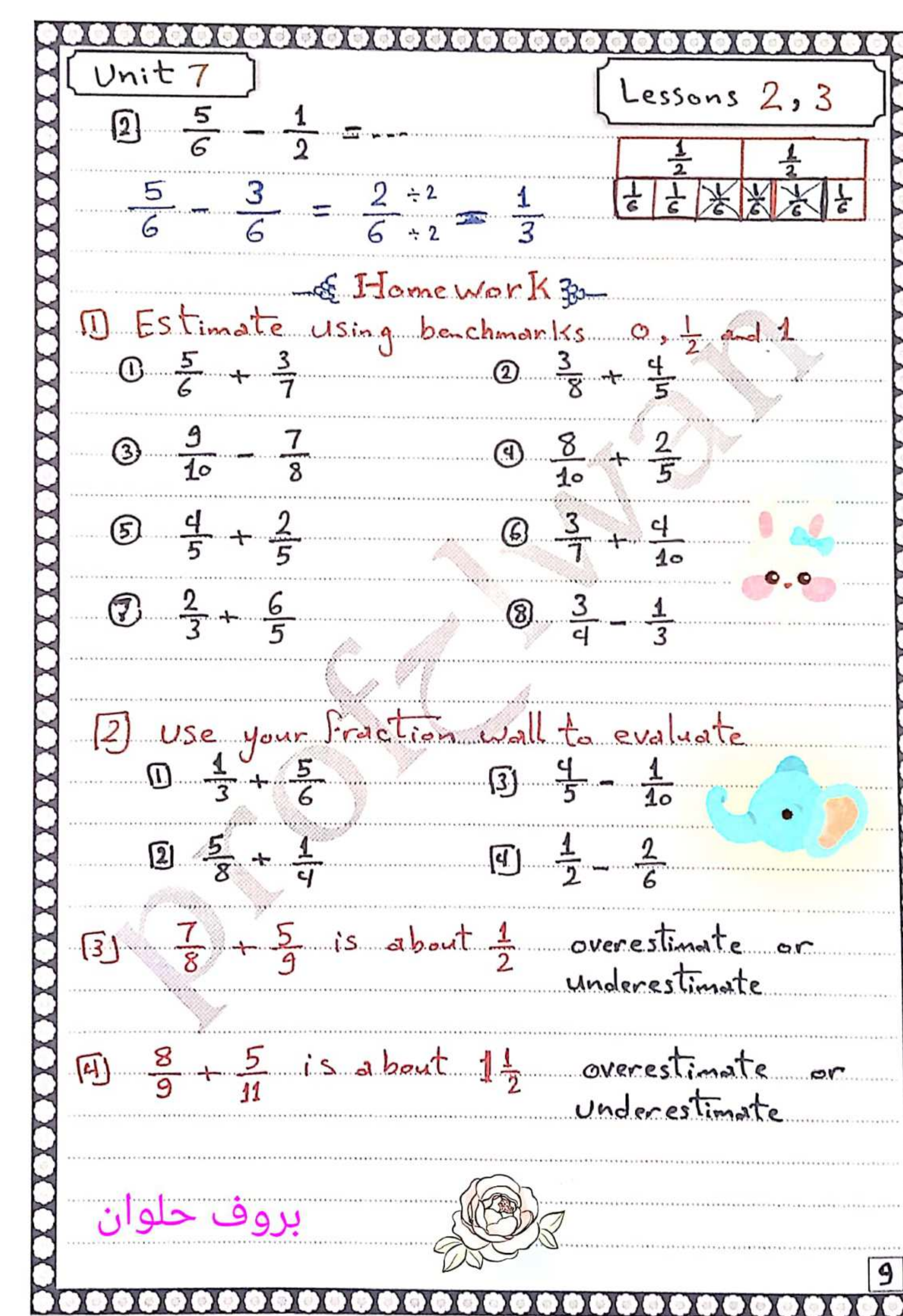
(1) $\frac{1}{3} + \frac{5}{6} =$

نجيب ال equivalent بتاع واحد

علشان كلهم ال Like denominators

$\frac{1}{3}$		$\frac{1}{3}$		$\frac{1}{3}$	
$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

$$\frac{2}{6} + \frac{5}{6} = \frac{7}{6}$$



[2] $\frac{5}{6} - \frac{1}{2} = \ldots$

$\frac{5}{6} - \frac{3}{6} = \frac{2 \div 2}{6 \div 2} = \frac{1}{3}$

$\frac{1}{2}$			$\frac{1}{2}$		
$\frac{1}{6}$	$\frac{1}{6}$	~~$\frac{1}{6}$~~	~~$\frac{1}{6}$~~	~~$\frac{1}{6}$~~	$\frac{1}{6}$

Homework

[1] Estimate using benchmarks $0, \frac{1}{2}$ and 1

① $\frac{5}{6} + \frac{3}{7}$

② $\frac{3}{8} + \frac{4}{5}$

③ $\frac{9}{10} - \frac{7}{8}$

④ $\frac{8}{10} + \frac{2}{5}$

⑤ $\frac{4}{5} + \frac{2}{5}$

⑥ $\frac{3}{7} + \frac{4}{10}$

⑦ $\frac{2}{3} + \frac{6}{5}$

⑧ $\frac{3}{4} - \frac{1}{3}$

[2] Use your fraction wall to evaluate

[1] $\frac{1}{3} + \frac{5}{6}$

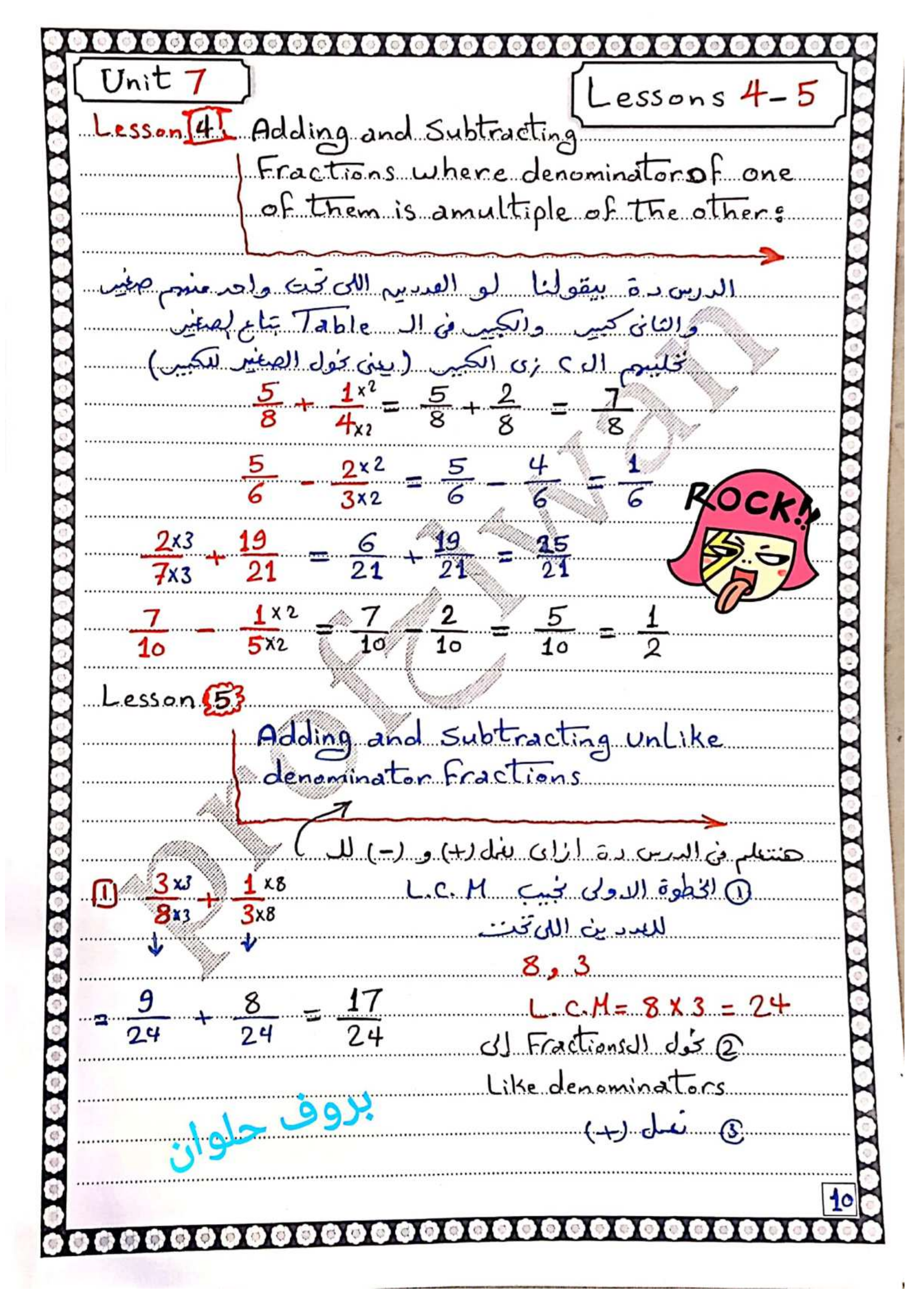
[3] $\frac{4}{5} - \frac{1}{10}$

[2] $\frac{5}{8} + \frac{1}{4}$

[4] $\frac{1}{2} - \frac{2}{6}$

[3] $\frac{7}{8} + \frac{5}{9}$ is about $\frac{1}{2}$ overestimate or underestimate

[4] $\frac{8}{9} + \frac{5}{11}$ is about $1\frac{1}{2}$ overestimate or underestimate



Unit 7

Lessons 4-5

Lesson 4: Adding and Subtracting Fractions where denominator of one of them is a multiple of the other:

الدرس دة بيقولنا لو العددين اللى تحت واحد منهم صغير والتانى كبير والكبير فى الـ Table بتاع الصغير نخليهم الـ 2 زى الكبير (يعنى نحول الصغير للكبير)

$$\frac{5}{8} + \frac{1^{\times 2}}{4_{\times 2}} = \frac{5}{8} + \frac{2}{8} = \frac{7}{8}$$

$$\frac{5}{6} - \frac{2^{\times 2}}{3_{\times 2}} = \frac{5}{6} - \frac{4}{6} = \frac{1}{6}$$

$$\frac{2\times 3}{7\times 3} + \frac{19}{21} = \frac{6}{21} + \frac{19}{21} = \frac{25}{21}$$

$$\frac{7}{10} - \frac{1^{\times 2}}{5_{\times 2}} = \frac{7}{10} - \frac{2}{10} = \frac{5}{10} = \frac{1}{2}$$

Lesson 5: Adding and Subtracting unlike denominator fractions

هنتعلم فى الدرس دة ازاى نعمل (+) و (-) لل

① الخطوة الاولى نجيب L.C.M للعددين اللى تحت

8 , 3

L.C.M = 8 × 3 = 24

② نحول الFractions لى Like denominators

③ نعمل (+)

1. $$\frac{3^{\times 3}}{8_{\times 3}} + \frac{1^{\times 8}}{3_{\times 8}}$$

$$= \frac{9}{24} + \frac{8}{24} = \frac{17}{24}$$

2) $\frac{7^{\times 2}}{9_{\times 2}} - \frac{1^{\times 3}}{6_{\times 3}}$

$9 = 3 \times 3$

$6 = 3 \times 2$

L.C.M $= 3 \times 3 \times 2 = 18$

$\frac{14}{18} - \frac{3}{18}$

$= \frac{11}{18}$

3) $\frac{2^{\times 8}}{5_{\times 8}} + \frac{3^{\times 5}}{8_{\times 5}} + 1$

L.C.M $= 5 \times 8 = 40$

$\frac{16}{40} + \frac{15}{40} + \frac{40}{40} = \frac{71}{40} = 1\frac{31}{40}$

4) $1 - \frac{1}{4} - \frac{1}{5}$

L.C.M $= 20$

$\frac{20}{20} - \frac{5}{20} - \frac{4}{20} = \frac{11}{20}$

5) Who is Correct? Soliman, Seif and Samar

$\frac{1}{12} + \frac{2}{3}$

Soliman's Answer $\frac{9}{12}$

Seif's Answer $\frac{3}{15}$

Samar's Answer $\frac{3}{4}$

1) IS Soliman Correct? why?

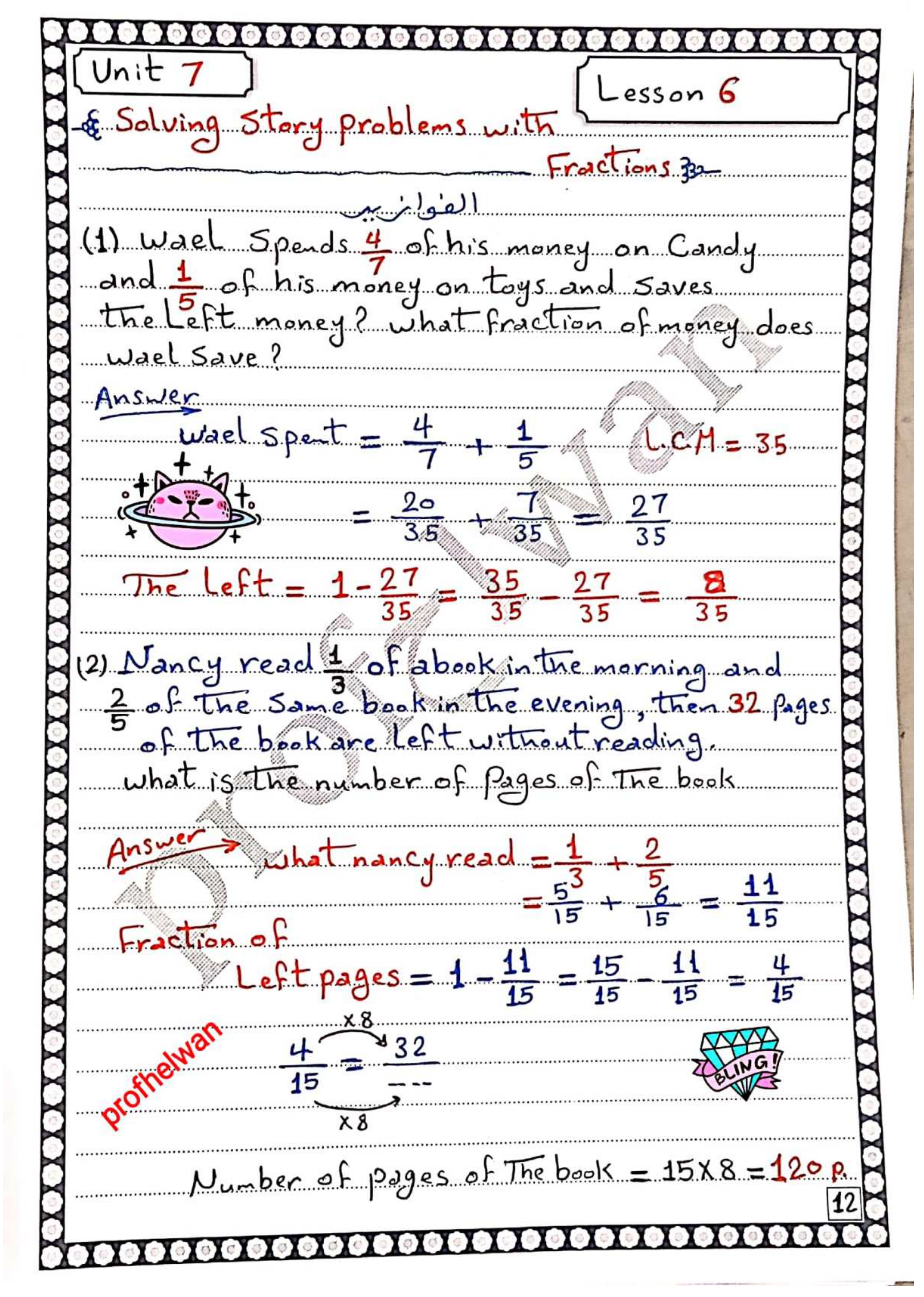
Yes, He rewrote the fractions with like denominators using L.C.M

2) IS Seif Correct? why?

No, He added numerators and denominators.

3) IS Samar Correct? why?

Yes, She Simplified the answer.



Unit 7

Lesson 6

Solving Story problems with Fractions

الفوازير

(1) Wael Spends $\frac{4}{7}$ of his money on Candy and $\frac{1}{5}$ of his money on toys and Saves the Left money? what fraction of money does Wael Save?

Answer

Wael spent $= \frac{4}{7} + \frac{1}{5}$ L.C.M = 35

$= \frac{20}{35} + \frac{7}{35} = \frac{27}{35}$

The Left $= 1 - \frac{27}{35} = \frac{35}{35} - \frac{27}{35} = \frac{8}{35}$

(2) Nancy read $\frac{1}{3}$ of a book in the morning and $\frac{2}{5}$ of the Same book in the evening, then 32 pages of the book are left without reading. what is the number of Pages of The book

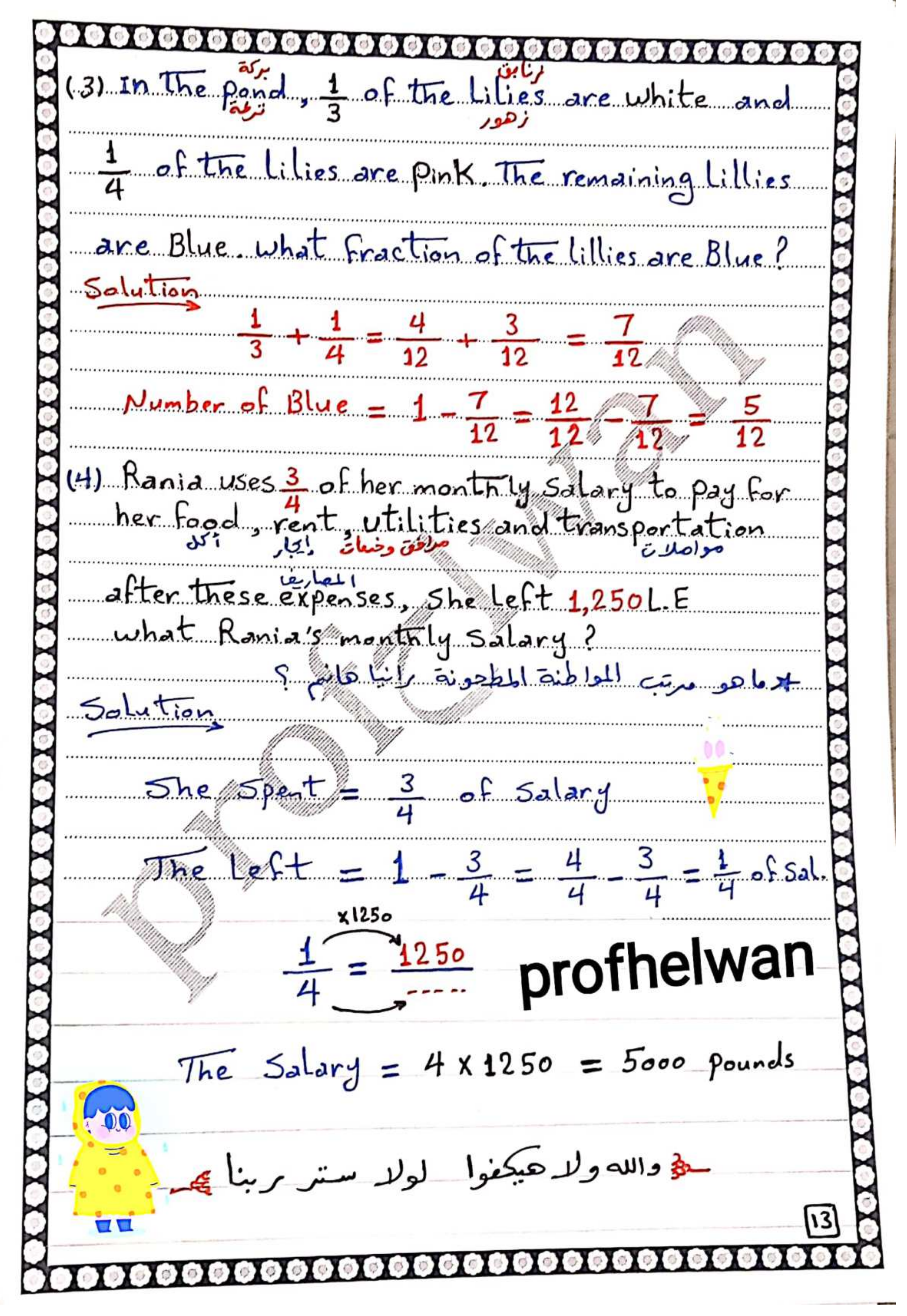
Answer → what nancy read $= \frac{1}{3} + \frac{2}{5}$

$= \frac{5}{15} + \frac{6}{15} = \frac{11}{15}$

Fraction of Left pages $= 1 - \frac{11}{15} = \frac{15}{15} - \frac{11}{15} = \frac{4}{15}$

$\frac{4}{15} = \frac{32}{---}$ (×8)

Number of pages of The book = 15 × 8 = 120 p.



(3) In The pond (بركة / ترعة), $\frac{1}{3}$ of the Lilies (زنابق / زهور) are white and $\frac{1}{4}$ of the Lilies are Pink. The remaining Lillies are Blue. what fraction of the lillies are Blue?

Solution

$$\frac{1}{3} + \frac{1}{4} = \frac{4}{12} + \frac{3}{12} = \frac{7}{12}$$

Number of Blue $= 1 - \frac{7}{12} = \frac{12}{12} - \frac{7}{12} = \frac{5}{12}$

(4) Rania uses $\frac{3}{4}$ of her monthly Salary to pay for her food (أكل), rent (إيجار), utilities (مرافق وخدمات) and transportation (مواصلات)

after these expenses (المصاريف), She Left 1,250 L.E

what Rania's monthly Salary?

* ماهو مرتب المواطنة المطحونة رانيا هانم ؟

Solution

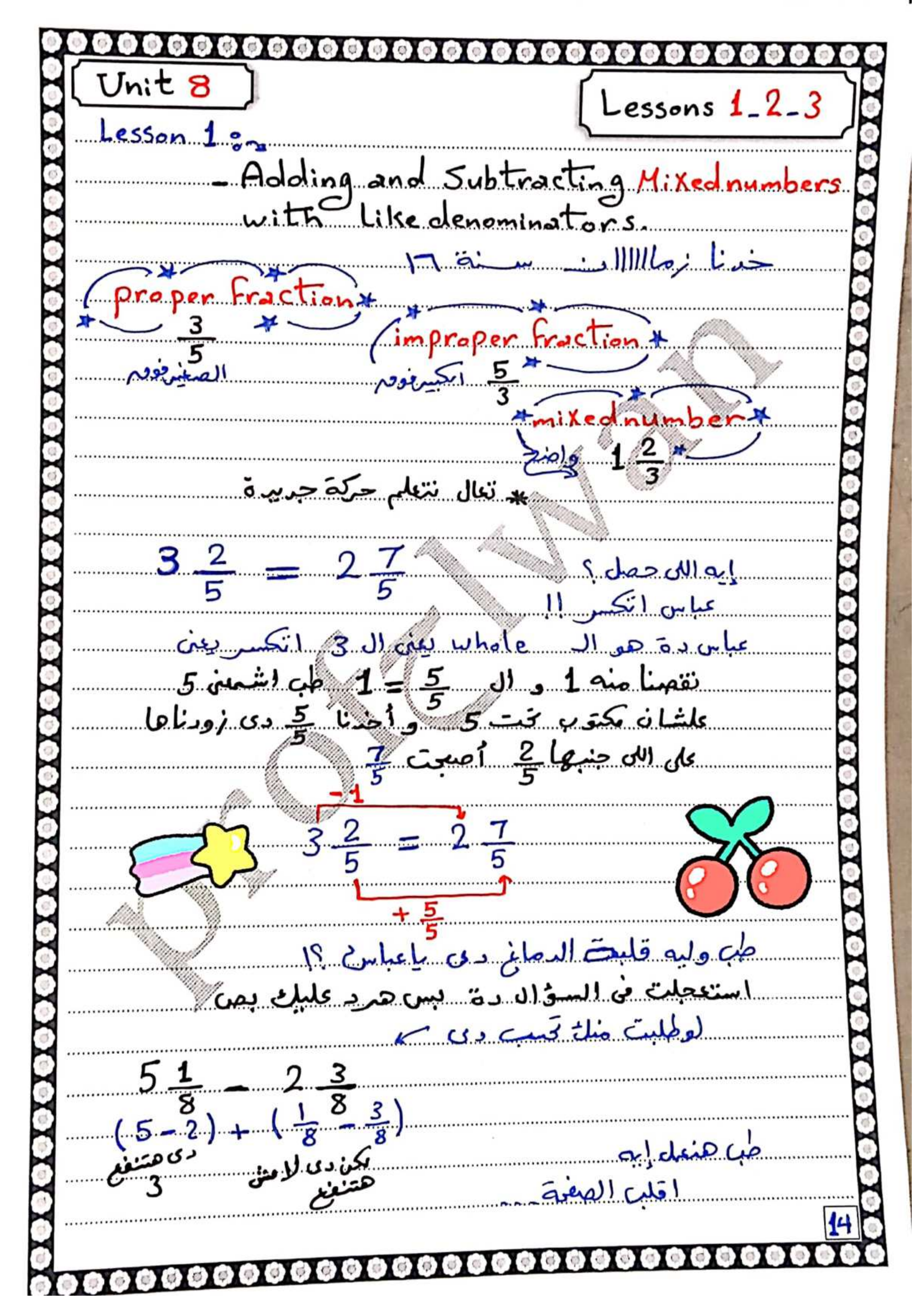
She Spent $= \frac{3}{4}$ of Salary

The Left $= 1 - \frac{3}{4} = \frac{4}{4} - \frac{3}{4} = \frac{1}{4}$ of Sal.

$$\frac{1}{4} = \frac{1250}{----} \quad (\times 1250)$$

The Salary $= 4 \times 1250 = 5000$ pounds

والله ولا هيكفوا لولا ستر ربنا



Unit 8

Lessons 1_2_3

Lesson 1:

- Adding and Subtracting Mixed numbers with Like denominators.

خدنا زمااااان سنة ١٦

proper fraction

$\frac{3}{5}$ الصغير فوق

improper fraction

$\frac{5}{3}$ الكبير فوق

mixed number

$1\frac{2}{3}$ واضح

* تعال نتعلم حركة جديدة

$3\frac{2}{5} = 2\frac{7}{5}$

إيه اللى حصل ؟

عباس انكسر !!

عباس دة هو الـ whole يعنى الـ 3 انكسر يعنى

نقصنا منه 1 و الـ $1 = \frac{5}{5}$ طب اشمعنى 5

علشان مكتوب تحت 5 و أخدنا $\frac{5}{5}$ دى زودناها

على اللى جنبها $\frac{2}{5}$ أصبحت $\frac{7}{5}$

$$3\frac{2}{5} \xrightarrow{-1} 2\frac{7}{5} \quad \left(+\frac{5}{5}\right)$$

طب وليه قلبت الدماغ دى ياعباس ؟!

استعجلت فى السؤال دة بس هرد عليك بص

لو طلبت منك تجيب دى ←

$5\frac{1}{8} - 2\frac{3}{8}$

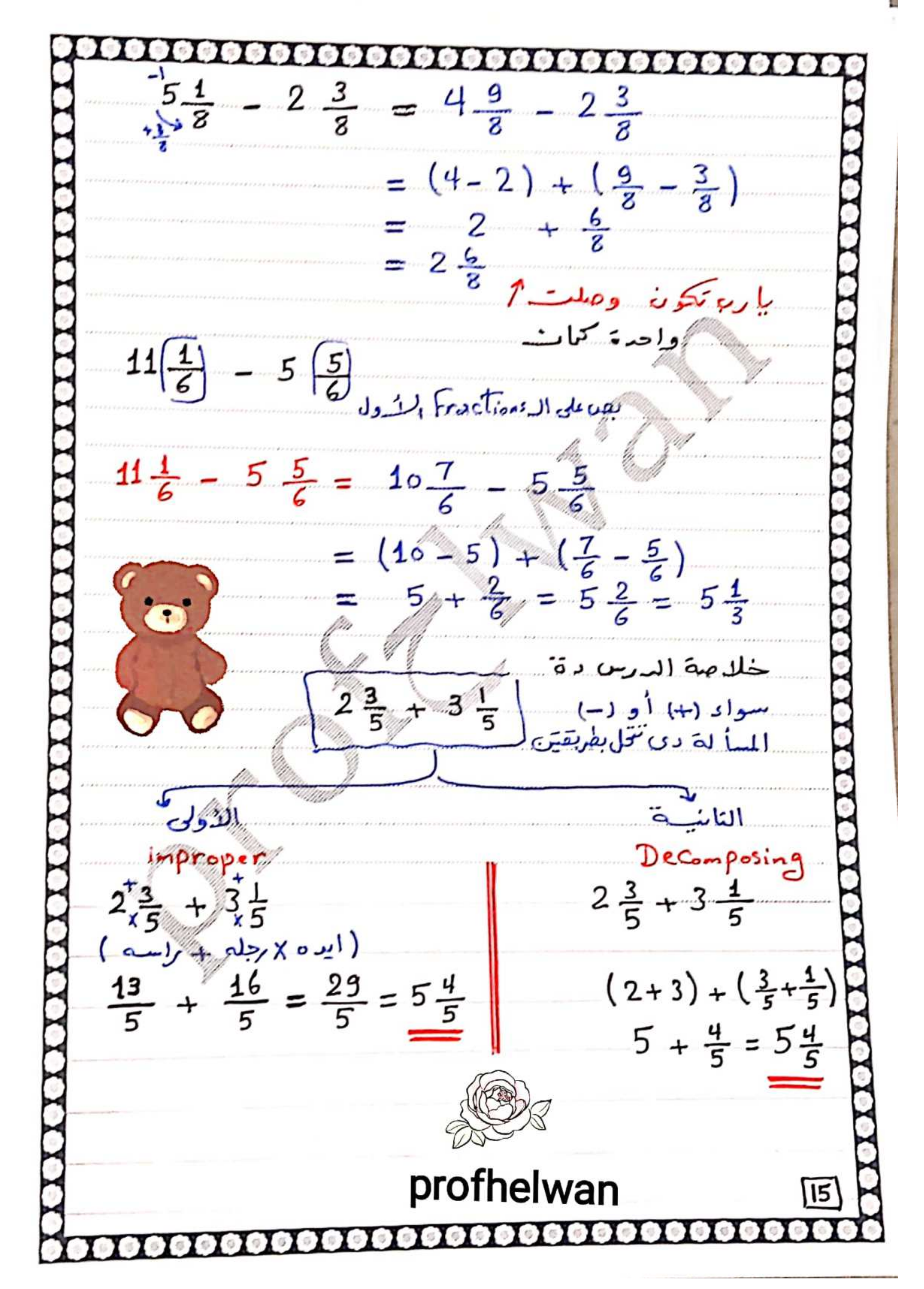
$(5-2) + \left(\frac{1}{8} - \frac{3}{8}\right)$

دى هتنفع 3

لكن دى لامش هتنفع

طب هنعمل إيه

اقلب الصفحة



$5\frac{1}{8} - 2\frac{3}{8} = 4\frac{9}{8} - 2\frac{3}{8}$

$= (4-2) + (\frac{9}{8} - \frac{3}{8})$

$= 2 + \frac{6}{8}$

$= 2\frac{6}{8}$

يارب تكون وصلت ↑

واحدة كمان

$11\frac{1}{6} - 5\frac{5}{6}$

بص على الـ Fractions الأول

$11\frac{1}{6} - 5\frac{5}{6} = 10\frac{7}{6} - 5\frac{5}{6}$

$= (10-5) + (\frac{7}{6} - \frac{5}{6})$

$= 5 + \frac{2}{6} = 5\frac{2}{6} = 5\frac{1}{3}$

خلاصة الدرس دة

سواء (+) أو (-)

المسألة دى تتحل بطريقتين

$2\frac{3}{5} + 3\frac{1}{5}$

الأولى

improper

$2\frac{3}{5} + 3\frac{1}{5}$

(ايده X رجله + راسه)

$\frac{13}{5} + \frac{16}{5} = \frac{29}{5} = 5\frac{4}{5}$

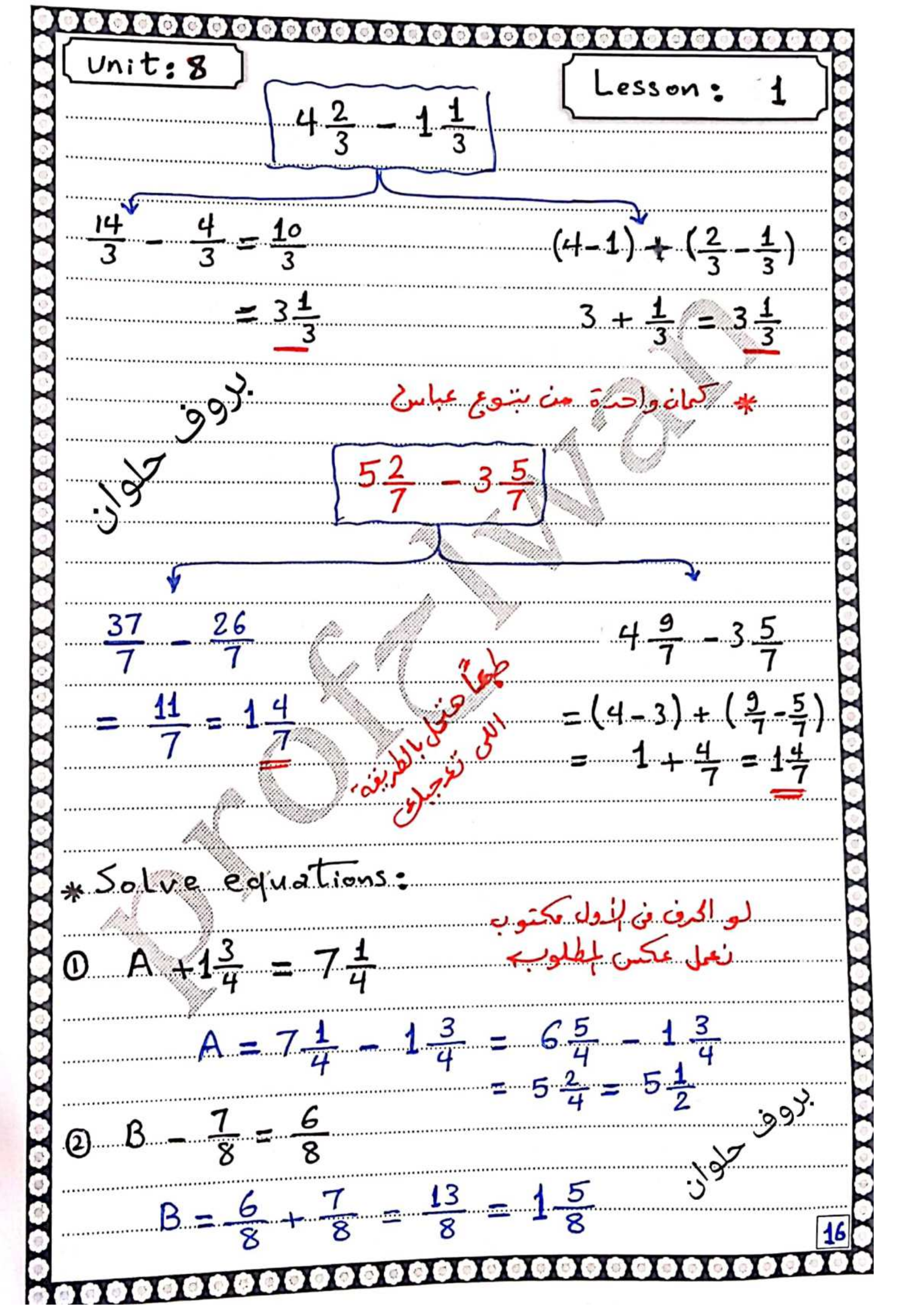
الثانية

Decomposing

$2\frac{3}{5} + 3\frac{1}{5}$

$(2+3) + (\frac{3}{5} + \frac{1}{5})$

$5 + \frac{4}{5} = 5\frac{4}{5}$



Unit: 8

Lesson: 1

$$4\frac{2}{3} - 1\frac{1}{3}$$

$\frac{14}{3} - \frac{4}{3} = \frac{10}{3}$

$= 3\frac{1}{3}$

$(4-1) + (\frac{2}{3} - \frac{1}{3})$

$3 + \frac{1}{3} = 3\frac{1}{3}$

بروف حلوان

* كمان واحدة من بتوع عباس

$$5\frac{2}{7} - 3\frac{5}{7}$$

$\frac{37}{7} - \frac{26}{7}$

$= \frac{11}{7} = 1\frac{4}{7}$

$4\frac{9}{7} - 3\frac{5}{7}$

$= (4-3) + (\frac{9}{7} - \frac{5}{7})$

$= 1 + \frac{4}{7} = 1\frac{4}{7}$

طبعاً هتحل بالطريقة اللى تعجبك

* Solve equations:

لو الحرف فى الأول مكتوب نعمل عكس المطلوب

① $A + 1\frac{3}{4} = 7\frac{1}{4}$

$A = 7\frac{1}{4} - 1\frac{3}{4} = 6\frac{5}{4} - 1\frac{3}{4}$

$= 5\frac{2}{4} = 5\frac{1}{2}$

② $B - \frac{7}{8} = \frac{6}{8}$

$B = \frac{6}{8} + \frac{7}{8} = \frac{13}{8} = 1\frac{5}{8}$

بروف حلوان

③ $2\frac{5}{8} - C = 1\frac{1}{8}$

لو الحرف في النص
و
(-) هنغير ما بنص

$C = 2\frac{5}{8} - 1\frac{1}{8} = 1\frac{4}{8} = 1\frac{1}{2}$

④ $4 - p = 1\frac{1}{5}$

$p = 4 - 1\frac{1}{5} = 3\frac{5}{5} - 1\frac{1}{5} = 2\frac{4}{5}$

(Lesson 2) : Finding Like denominators

use L.C.M

1 Rewrite The given two mixed numbers with Like deno. in two different ways

خليهم Like بطريقتين مختلفتين

$3\frac{1}{4}$ and $1\frac{6}{30}$

الطريقة الأولى : نجيب ال L.C.M

للي تحت 4 , 30

$4 \times 15 = 60$ $\quad$ $30 \times 2 = 60$

$3\frac{15}{60}$, $1\frac{12}{60}$

4 → 2 , 2

30 → 5 , 6 → 2 , 3

$4 = 2 \times 2$

$30 = 2 \times 3 \times 5$

$L.C.M = 2 \times 2 \times 3 \times 5 = \boxed{60}$

الطريقة الثانية : نعمل Simplify قبل ما نجيب L.C.M

$3\frac{1}{4}$, $1\frac{6}{30} = 1\frac{1}{5}$

L.C.M to 4 and 5 is $\boxed{20}$

$3\frac{5}{20}$, $1\frac{4}{20}$

أعتقد دي أسهل

Unit: 8

Lesson: 2

$10\frac{5}{6}$ and $5\frac{15}{27}$ واحدة كمان

First way L.C.M for 6 and 27

6 → 2, 3

27 → 3, 9 → 3, 3

$6 = 2 \times 3$

$27 = 3 \times 3 \times 3$

$\text{L.C.M} = 2 \times 3 \times 3 \times 3 = \boxed{54}$

$6 \times 9 = 54$

$27 \times 2 = 54$

$10\frac{5 \times 9}{6 \times 9} = \boxed{10\frac{45}{54}}$ ، $5\frac{15 \times 2}{27 \times 2} = \boxed{5\frac{30}{54}}$

Second way Simplify

$10\frac{5}{6}$ ، $5\frac{15 \div 3}{27 \div 3} = 5\frac{5}{9}$

زي ما هي

L.C.M for 6 and 9

$6 = 2 \times 3$

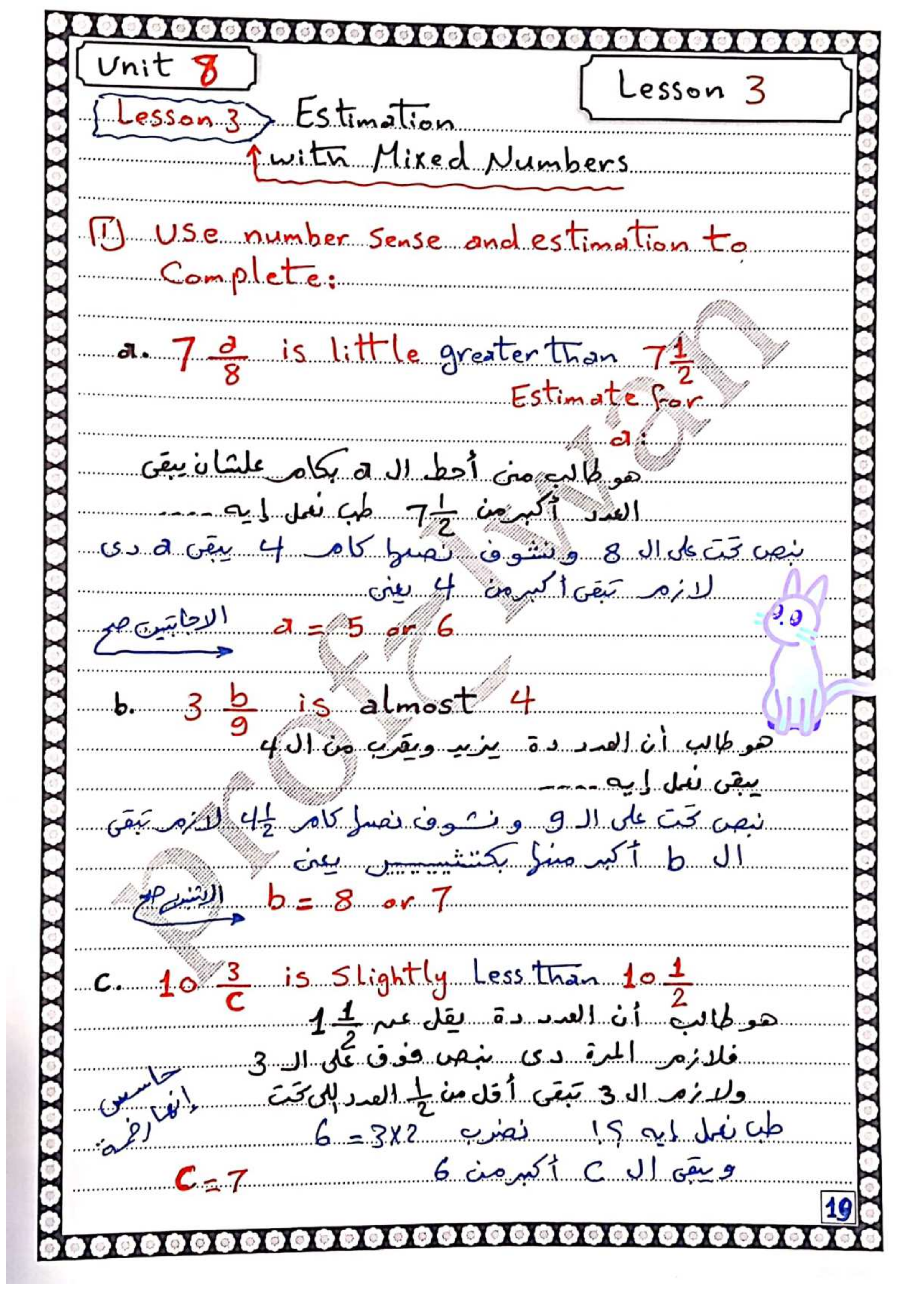
$9 = 3 \times 3$

$\text{L.C.M} = 2 \times 3 \times 3 = \boxed{18}$

$6 \times 3 = 18$

$9 \times 2 = 18$

$10\frac{5}{6} = \boxed{10\frac{15}{18}}$ ، $5\frac{5}{9} = \boxed{5\frac{10}{18}}$



Unit 8

Lesson 3

Lesson 3 → Estimation with Mixed Numbers

1) Use number sense and estimation to Complete:

a. $7\frac{a}{8}$ is little greater than $7\frac{1}{2}$

Estimate for a:

هو طالب مني أحط ال a بكام علشان يبقى العدد أكبر من $7\frac{1}{2}$ طب نعمل إيه ....

نبص تحت على ال 8 ونشوف نصها كام 4 يبقى a دي لازم تبقى أكبر من 4 يعني

الإجابتين صح → $a = 5$ or 6

b. $3\frac{b}{9}$ is almost 4

هو طالب أن العدد ده يزيد ويقرب من ال 4 يبقى نعمل إيه ....

نبص تحت على ال 9 ونشوف نصها كام $4\frac{1}{2}$ لازم تبقى ال b أكبر منها بكتيييير يعني

الاتنين صح → $b = 8$ or 7

c. $10\frac{3}{c}$ is Slightly Less than $10\frac{1}{2}$

هو طالب أن العدد ده يقل عن $1\frac{1}{2}$

فلازم المرة دي نبص فوق على ال 3

ولازم ال 3 تبقى أقل من $\frac{1}{2}$ العدد اللي تحت

طب نعمل إيه ؟! نضرب $6 = 3 \times 2$

ويبقى ال C أكبر من 6

حاسس إنها راخمة

$C = 7$

2 Using estimation to add and subtract

a) $6\frac{3}{4} - 2\frac{1}{5}$

$\frac{3}{4} \rightarrow 1$ $\quad$ $6\frac{3}{4} \rightarrow 7$

$\frac{1}{5} \rightarrow 0$ $\quad$ $2\frac{1}{5} \rightarrow 2$

$6\frac{3}{4} - 2\frac{1}{5}$ estimate $7 - 2 = 5$

b) $4\frac{2}{3} + 3\frac{5}{6}$ $\quad$ $\frac{2}{3} \rightarrow 1$

$4\frac{2}{3} \rightarrow 5$ $\quad$ $\frac{5}{6} \rightarrow 1$

$3\frac{5}{6} \rightarrow 4$ $\quad$ $4\frac{2}{3} + 3\frac{5}{6}$ estimate $5 + 4 = 9$

c) $2\frac{1}{5} + 3\frac{10}{21} = 2 + 3\frac{1}{2} = 5\frac{1}{2}$

$\frac{10}{21} \Rightarrow \frac{1}{2}$

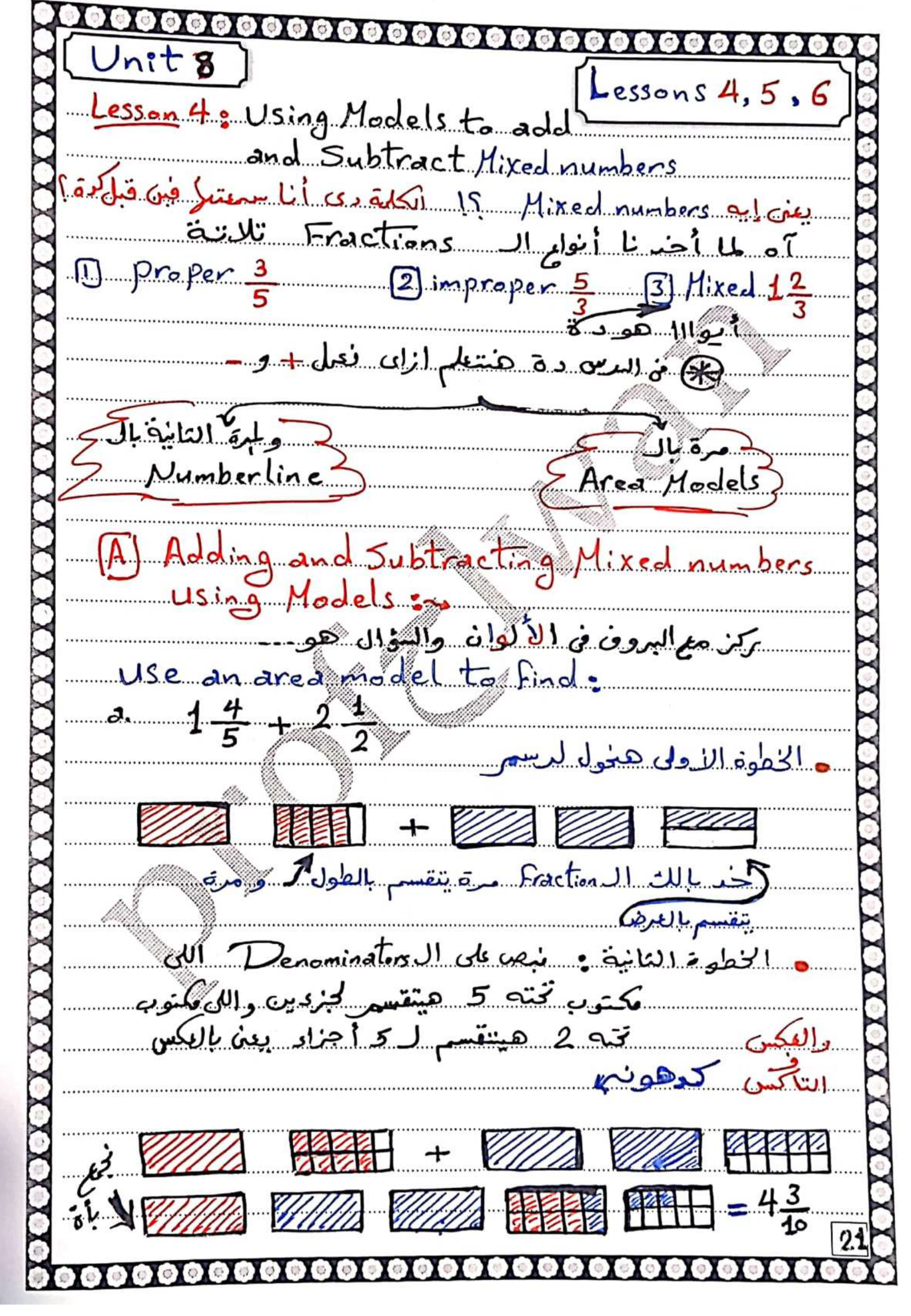
علشان 21 نصها $10\frac{1}{2}$
وال 10 قريبة منها

d) $4\frac{3}{5} - 1\frac{7}{12} = 4\frac{1}{2} - 1\frac{1}{2} = 3$

e) $3\frac{21}{24} - 2\frac{1}{3} = 4 - 2\frac{1}{2} = 1\frac{1}{2}$

f) $9\frac{6}{11} + 2\frac{3}{100} = 9\frac{1}{2} + 2 = 11\frac{1}{2}$

g) $7\frac{5}{14} - 3\frac{19}{34} = 7\frac{1}{2} - 3\frac{1}{2} = 4$



Unit 8 — Lessons 4, 5, 6

Lesson 4: Using Models to add and Subtract Mixed numbers

يعني إيه Mixed numbers ؟! الكلمة دي أنا سمعتها فين قبل كدة؟!

آه لما أخدنا أنواع الـ Fractions تلاتة

1. Proper $\frac{3}{5}$ 2. improper $\frac{5}{3}$ 3. Mixed $1\frac{2}{3}$

أيوااا هو دة

* في الدرس دة هنتعلم ازاي نعمل + و −

مرة بالـ Area Models

والمرة التانية بالـ Numberline

A) Adding and Subtracting Mixed numbers using Models:

ركز مع الحروف في الألوان والسؤال هو...

Use an area model to find:

a. $1\frac{4}{5} + 2\frac{1}{2}$

• الخطوة الأولى هنحول لرسم

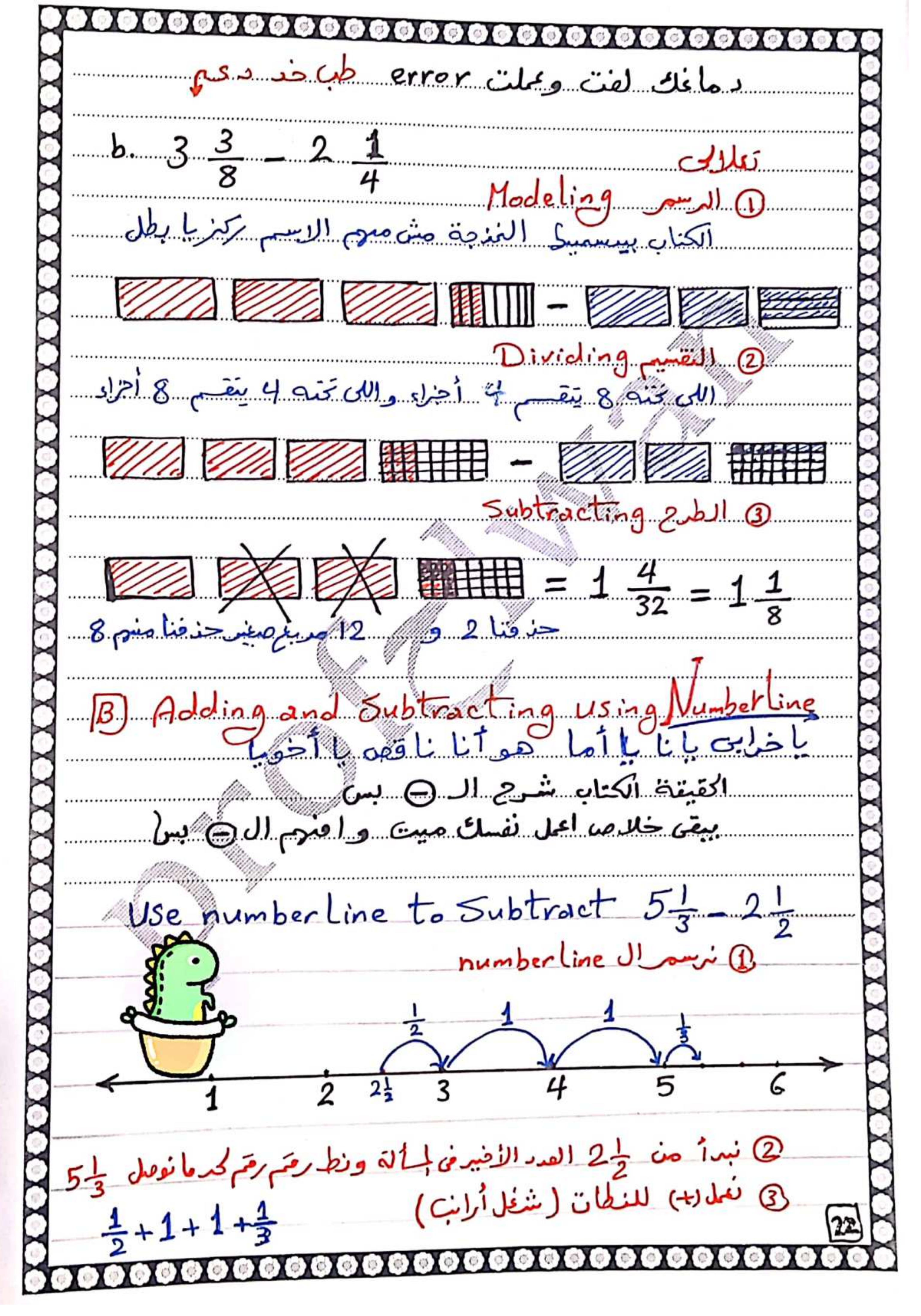
خد بالك الـ Fraction مرة يتقسم بالطول و مرة يتقسم بالعرض

• الخطوة التانية: نبص على الـ Denominators اللي مكتوب تحته 5 هيتقسم لجزءين واللي مكتوب تحته 2 هيتقسم لـ 5 أجزاء يعني بالعكس

والعكس في التاكس كدهونه

نجمع بأة

$= 4\frac{3}{10}$



دماغك لفت وعملت error طب خد دي

b. $3\frac{3}{8} - 2\frac{1}{4}$

تعلالي

① الرسم Modeling

الكتاب بيسميها النمذجة مش مهم الاسم ركز يا بطل

② التقسيم Dividing

اللي تحته 8 يتقسم 4 أجزاء واللي تحته 4 يتقسم 8 أجزاء

③ الطرح Subtracting

$= 1\frac{4}{32} = 1\frac{1}{8}$

حذفنا 2 و 12 مربع صغير حذفنا منهم 8

B) Adding and Subtracting using Numberline

ياخرابي يانا يا أما هو أنا ناقصه يا أخويا

الحقيقة الكتاب شرح الـ ⊖ بس

يبقى خلاص اعمل نفسك ميت وافهم الـ ⊖ بس

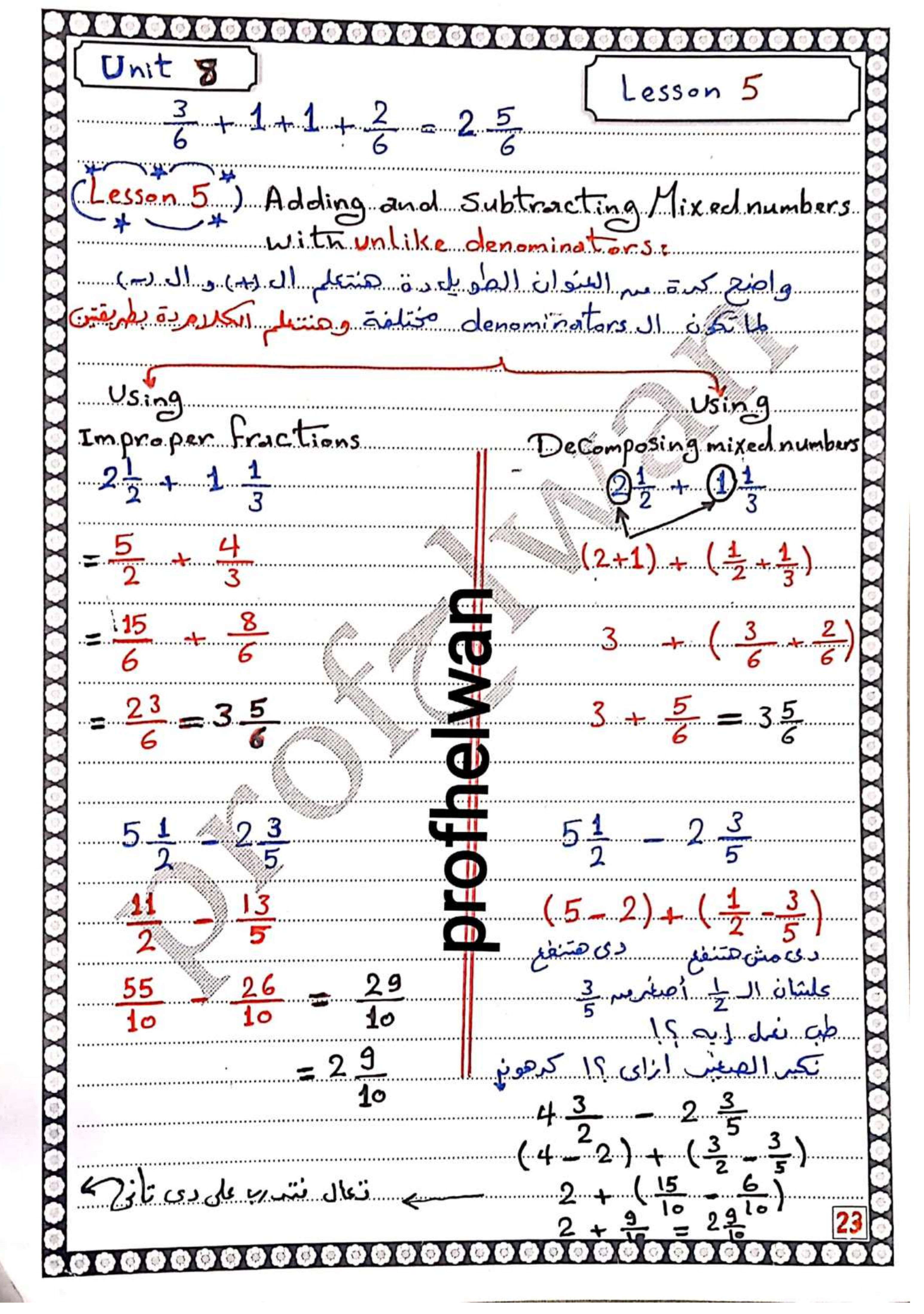
Use numberline to Subtract $5\frac{1}{3} - 2\frac{1}{2}$

① نرسم الـ numberline

② نبدأ من $2\frac{1}{2}$ العدد الأخير في المسألة ونط رقم رقم لحد ما نوصل $5\frac{1}{3}$

③ نعمل (+) للنطات (شغل أرانب)

$\frac{1}{2} + 1 + 1 + \frac{1}{3}$



Unit 8

Lesson 5

$\frac{3}{6} + 1 + 1 + \frac{2}{6} = 2\frac{5}{6}$

(Lesson 5) Adding and Subtracting Mixed numbers with unlike denominators:

واضح كدة من العنوان الطويل دة هنتعلم الـ(+) والـ(-)
لما تكون الـ denominators مختلفة وهنتعلم الكلام دة بطريقتين

Using Improper fractions

$2\frac{1}{2} + 1\frac{1}{3}$

$= \frac{5}{2} + \frac{4}{3}$

$= \frac{15}{6} + \frac{8}{6}$

$= \frac{23}{6} = 3\frac{5}{6}$

$5\frac{1}{2} - 2\frac{3}{5}$

$\frac{11}{2} - \frac{13}{5}$

$\frac{55}{10} - \frac{26}{10} = \frac{29}{10}$

$= 2\frac{9}{10}$

تعال نتدرب على دى تانى ←

Using Decomposing mixed numbers

$2\frac{1}{2} + 1\frac{1}{3}$

$(2+1) + (\frac{1}{2} + \frac{1}{3})$

$3 + (\frac{3}{6} + \frac{2}{6})$

$3 + \frac{5}{6} = 3\frac{5}{6}$

$5\frac{1}{2} - 2\frac{3}{5}$

$(5-2) + (\frac{1}{2} - \frac{3}{5})$

دى هتنفع — دى مش هتنفع

علشان الـ $\frac{1}{2}$ أصغر من $\frac{3}{5}$

طب نعمل إيه ؟!

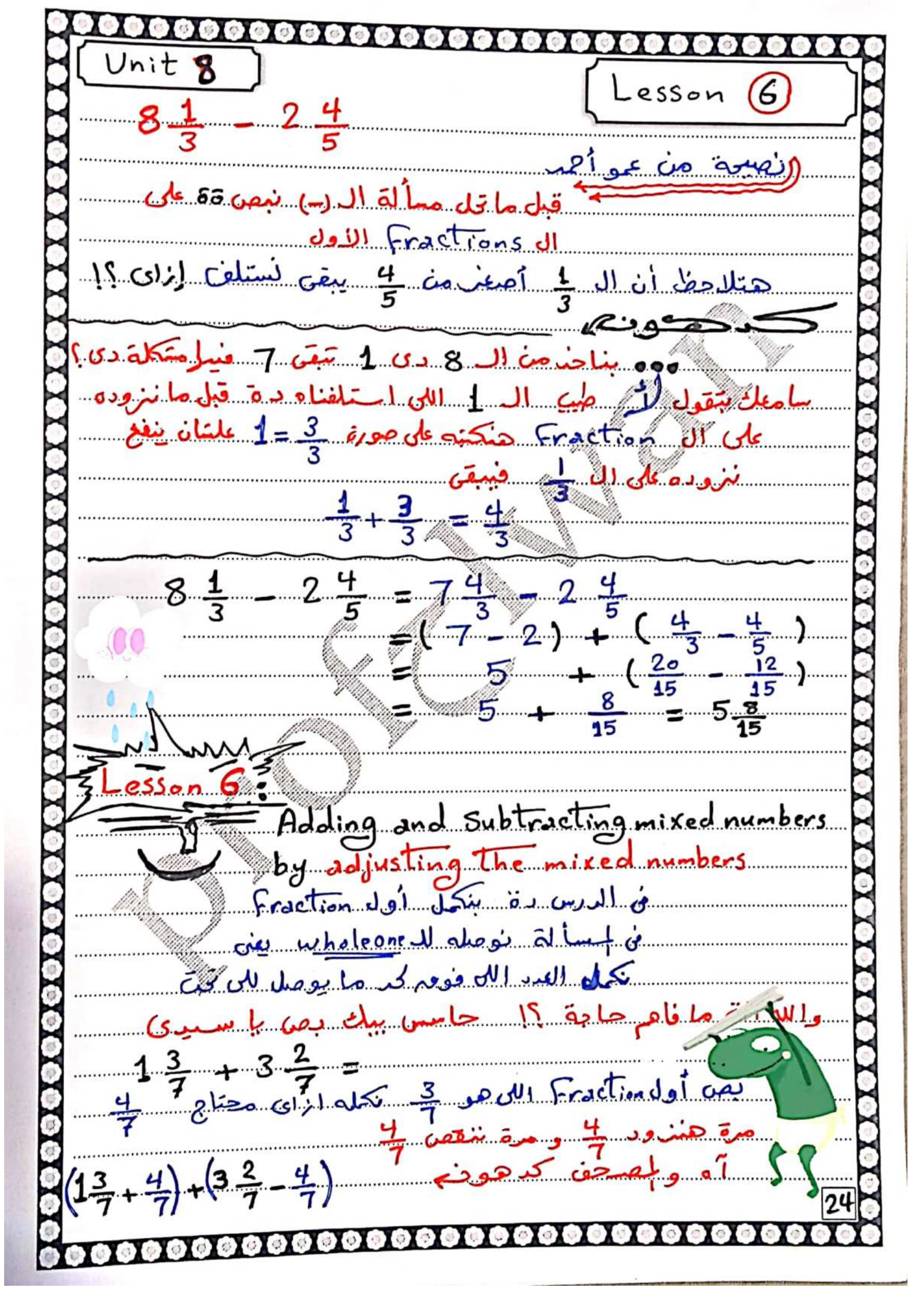
نكبر الصغير ازاى ؟! كدهون

$4\frac{3}{2} - 2\frac{3}{5}$

$(4-2) + (\frac{3}{2} - \frac{3}{5})$

$2 + (\frac{15}{10} - \frac{6}{10})$

$2 + \frac{9}{10} = 2\frac{9}{10}$



Unit 8

Lesson 6

$8\frac{1}{3} - 2\frac{4}{5}$

نصيحة من عمو أحمد

قبل ما تحل مسألة الـ(-) نبص على الـ fractions الأول

هتلاحظ أن الـ $\frac{1}{3}$ أصغر من $\frac{4}{5}$ يبقى نستلف إزاى ؟!

كدهوه

بناخد من الـ 8 دى 1 تبقى 7 فين المشكلة دى ؟

سامعك بتقول أه طيب الـ 1 اللى استلفناه دة قبل ما نزوده على الـ Fraction هنكتبه على صورة $1 = \frac{3}{3}$ علشان ينفع نزوده على الـ $\frac{1}{3}$ فيبقى

$$\frac{1}{3} + \frac{3}{3} = \frac{4}{3}$$

$$8\frac{1}{3} - 2\frac{4}{5} = 7\frac{4}{3} - 2\frac{4}{5}$$
$$= (7 - 2) + (\frac{4}{3} - \frac{4}{5})$$
$$= 5 + (\frac{20}{15} - \frac{12}{15})$$
$$= 5 + \frac{8}{15} = 5\frac{8}{15}$$

Lesson 6:

Adding and Subtracting mixed numbers by adjusting the mixed numbers

فى الدرس دة بنكمل أول fraction فى المسألة نوصله للـ whole one يعنى نكمل العدد اللى فوقه لحد ما يوصل للى تحت

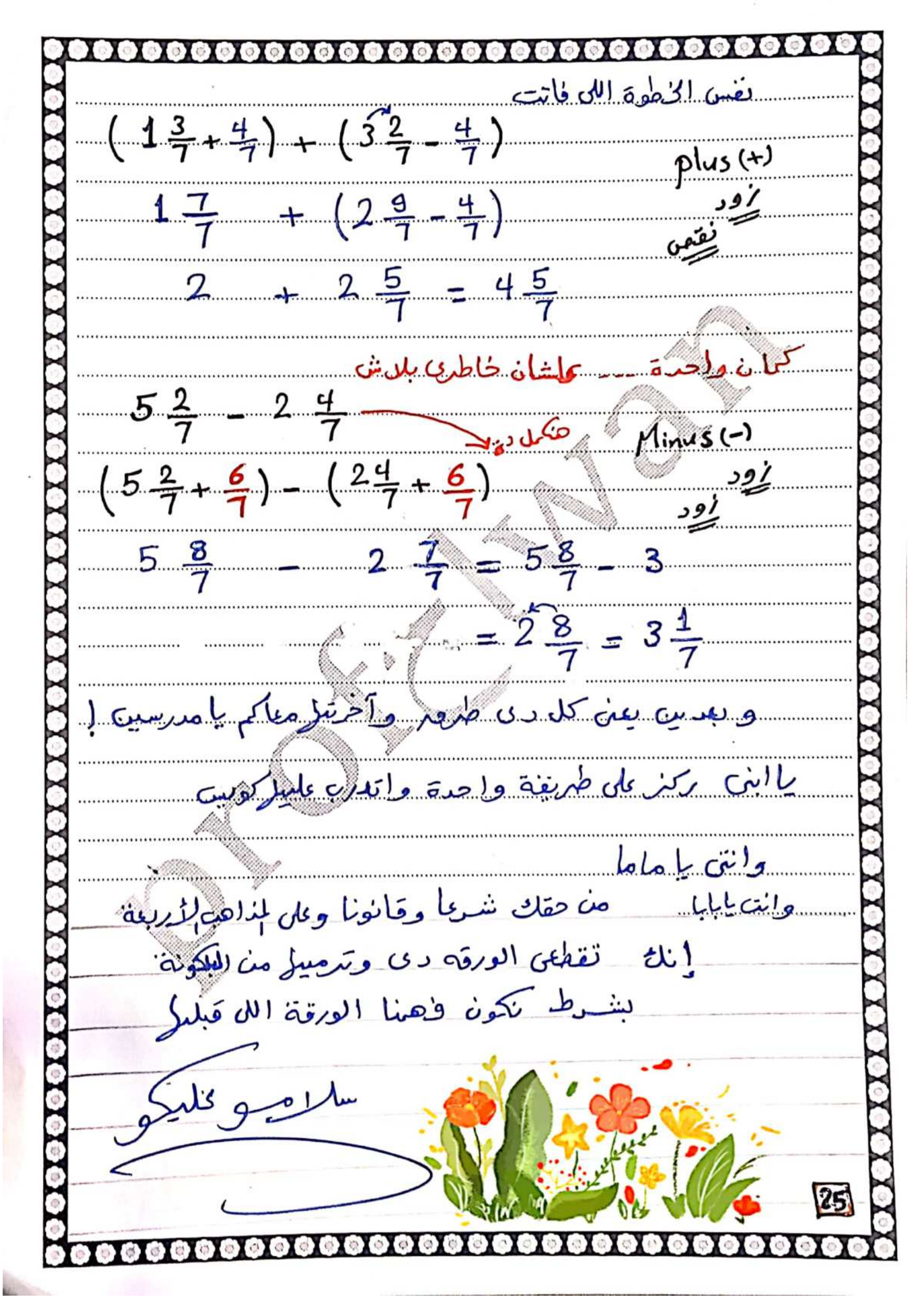
والله ما فاهم حاجة ؟! حاسس بيك بص يا سيدى

$1\frac{3}{7} + 3\frac{2}{7} =$

بص أول fraction اللى هو $\frac{3}{7}$ نكمله ازاى محتاج $\frac{4}{7}$

مرة هنزود $\frac{4}{7}$ ومرة ننقص $\frac{4}{7}$ آه وبالمصحف كدهوه

$$(1\frac{3}{7} + \frac{4}{7}) + (3\frac{2}{7} - \frac{4}{7})$$



نفس الخطوة اللى فاتت

$\left(1\frac{3}{7}+\frac{4}{7}\right)+\left(3\frac{2}{7}-\frac{4}{7}\right)$

plus (+)

زود

نقص

$1\frac{7}{7} \quad + \left(2\frac{9}{7}-\frac{4}{7}\right)$

$2 \quad + \quad 2\frac{5}{7} = 4\frac{5}{7}$

كمان واحدة ... علشان خاطرى بلاش

$5\frac{2}{7} - 2\frac{4}{7}$ → هكمل دى

Minus (−)

زود

زود

$\left(5\frac{2}{7}+\frac{6}{7}\right)-\left(2\frac{4}{7}+\frac{6}{7}\right)$

$5\frac{8}{7} \quad - \quad 2\frac{7}{7} = 5\frac{8}{7} - 3$

$= 2\frac{8}{7} = 3\frac{1}{7}$

وبعدين يعنى كل دى طرق وآخرتها معاكم يامدرسين !

ياابنى ركز على طريقة واحدة واتدرب عليها كويس

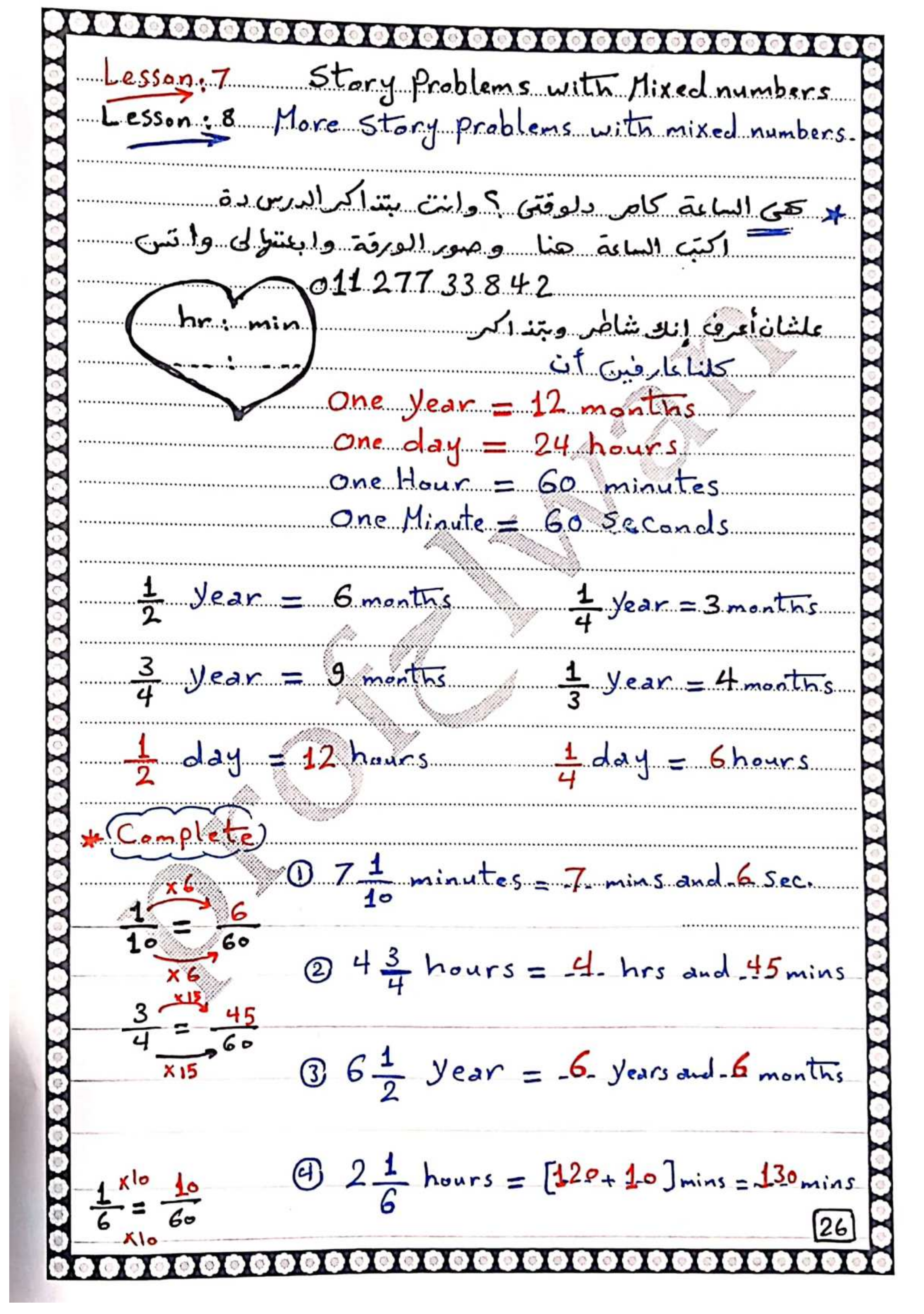
وانتى ياماما

وانت يابابا من حقك شرعا وقانونا وعلى المذاهب الأربعة

إنك تقطعى الورقه دى وترميها من البلكونة

بشرط نكون فهمنا الورقة اللى قبلها

سلام وخليكو



Lesson : 7 → Story Problems with Mixed numbers

Lesson : 8 → More Story problems with mixed numbers.

* هي الساعة كام دلوقتي ؟ وانت بتذاكر الدرس دة

اكتب الساعة هنا وصور الورقة وابعتها لي واتس

01127733842

hr : min

--- : ---

علشان أعرف إنك شاطر وبتذاكر

كلنا عارفين أن

One year = 12 months

One day = 24 hours

One Hour = 60 minutes

One Minute = 60 seconds

$\frac{1}{2}$ year = 6 months | $\frac{1}{4}$ year = 3 months

$\frac{3}{4}$ year = 9 months | $\frac{1}{3}$ year = 4 months

$\frac{1}{2}$ day = 12 hours | $\frac{1}{4}$ day = 6 hours

* Complete

① $7\frac{1}{10}$ minutes = 7 mins and 6 sec.

$\frac{1}{10} \xrightarrow{\times 6} \frac{6}{60}$

② $4\frac{3}{4}$ hours = 4 hrs and 45 mins

$\frac{3}{4} \xrightarrow{\times 15} \frac{45}{60}$

③ $6\frac{1}{2}$ year = 6 years and 6 months

④ $2\frac{1}{6}$ hours = [120 + 10] mins = 130 mins

$\frac{1}{6} \xrightarrow{\times 10} \frac{10}{60}$

⑤ 80 minutes = — hour

$$\frac{80}{60} = 1\frac{20}{60} = 1\frac{1}{3}$$

Lesson 8 : More Story Problems

تبين شوكي

(1) Habiba is planting three plume thistle plants it took her $\frac{5}{6}$ minute to plant the first one. The Second plant took $\frac{1}{12}$ min Longer to plant than The first. The third plant took $\frac{1}{10}$ Less than time to plant the second one. How Long did it take to plant the third plume thistle ?

Time of Second = $\frac{5}{6} + \frac{1}{12} = \frac{10}{12} + \frac{1}{12} = \frac{11}{12}$ min

Time of Third = $\frac{11}{12} - \frac{1}{10} = \frac{55}{60} - \frac{6}{60} = \frac{49}{60}$ mins

= 49 seconds

(2) Mona walked $3\frac{3}{4}$ Km on Monday, $4\frac{1}{3}$ Km on Tuseday and $2\frac{7}{12}$ Km on wednesday. what distance did she walk in all ?

Total distance = $3\frac{3}{4} + 4\frac{1}{3} +$

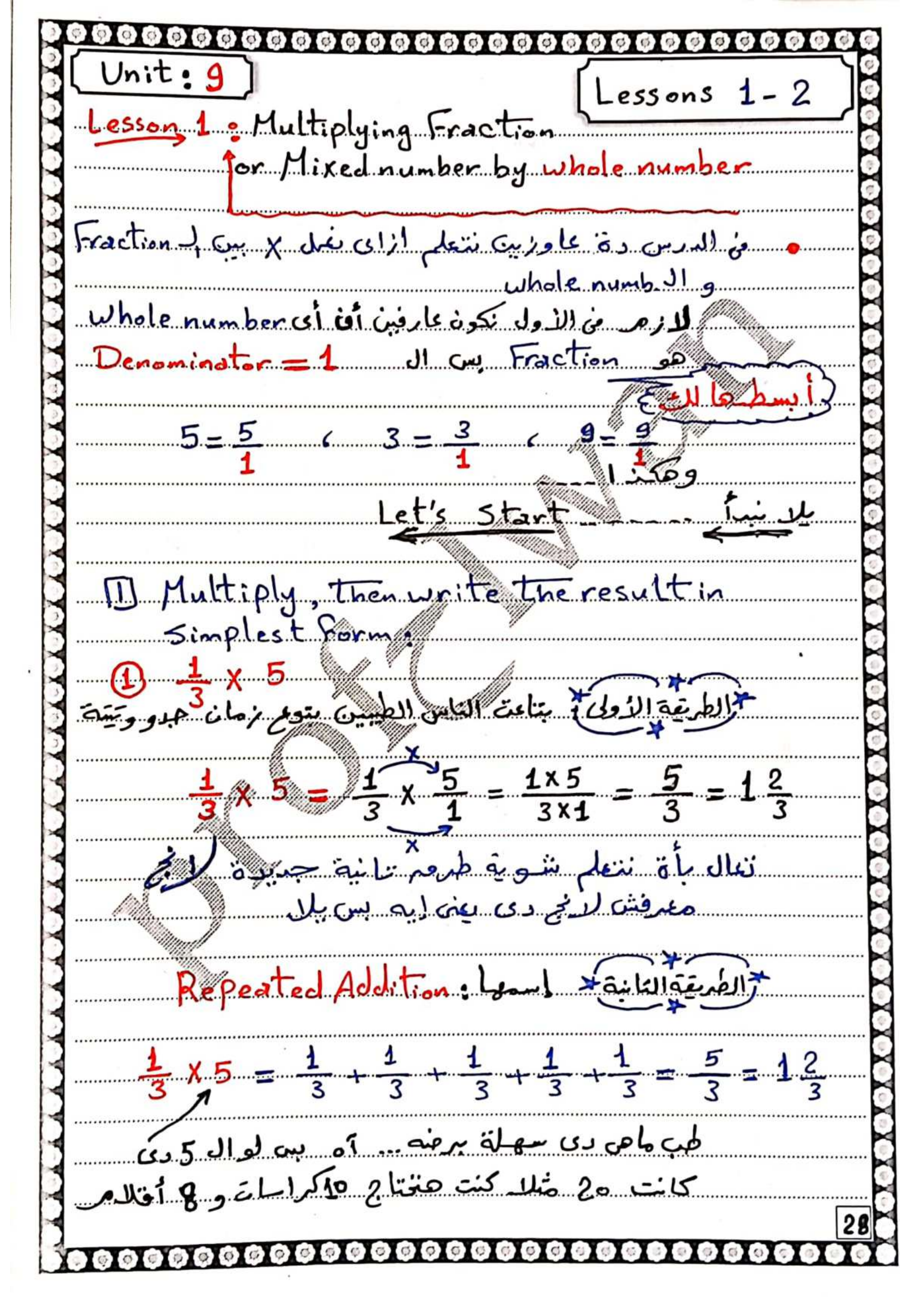
$= (3 + 4 + 2) + (\frac{3}{4} + \frac{1}{3} + \frac{7}{12})$

$= 9 + (\frac{9}{12} + \frac{4}{12} + \frac{7}{12})$

$= 9 + \frac{20}{12}$

$= 9 + 1\frac{8}{12} = 10\frac{8}{12} = 10\frac{2}{3}$

ادعوا لي دعوة من القلب .... بفك الكرب



Unit: 9

Lessons 1 - 2

Lesson 1: Multiplying Fraction or Mixed number by whole number

• في الدرس دة عاوزين نتعلم ازاى نضرب x بين ال Fraction و ال whole numb.

لازم من الأول نكون عارفين أن أى Whole number هو Fraction بس ال Denominator = 1

أبسطها لك

$5 = \frac{5}{1}$ ، $3 = \frac{3}{1}$ ، $9 = \frac{9}{1}$ وهكذا ...

يلا نبدأ ---- Let's Start

[1] Multiply, then write the result in simplest form:

① $\frac{1}{3} \times 5$

الطريقة الأولى: بتاعت الناس الطيبين بتوع زمان جدو وتيتة

$$\frac{1}{3} \times 5 = \frac{1}{3} \times \frac{5}{1} = \frac{1\times5}{3\times1} = \frac{5}{3} = 1\frac{2}{3}$$

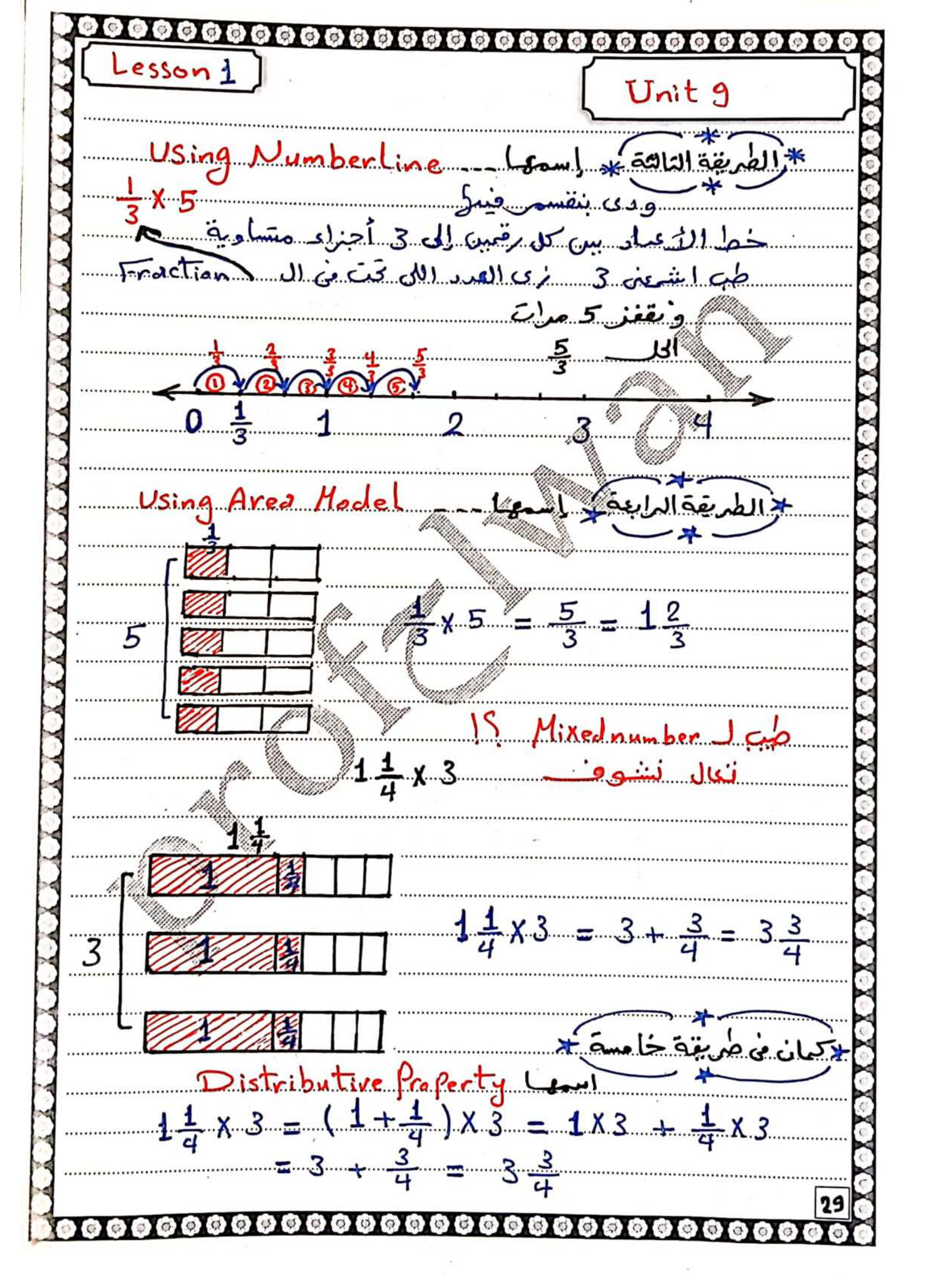
تعالى بأة نتعلم شوية طرق تانية جديدة لانج

معرفش لانج دى يعنى إيه بس يلا

الطريقة الثانية: اسمها Repeated Addition

$$\frac{1}{3} \times 5 = \frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{5}{3} = 1\frac{2}{3}$$

طب ماهى دى سهلة برضه... آه بس لو ال 5 دى كانت 20 مثلا كنت هتحتاج 10 كراسات و 8 أقلام



Lesson 1

Unit 9

Using Numberline --- اسمها * الطريقة الثالثة *

$\frac{1}{3} \times 5$ ودى بنقسم فيها

خط الأعداد بين كل رقمين إلى 3 أجزاء متساوية

طب اشمعنى 3 زى العدد اللى تحت فى ال Fraction

ونقفز 5 مرات

الحل $\frac{5}{3}$

Using Area Model --- اسمها * الطريقة الرابعة *

$\frac{1}{3} \times 5 = \frac{5}{3} = 1\frac{2}{3}$

طب لـ Mixednumber ؟!

تعال نشوف

$1\frac{1}{4} \times 3$

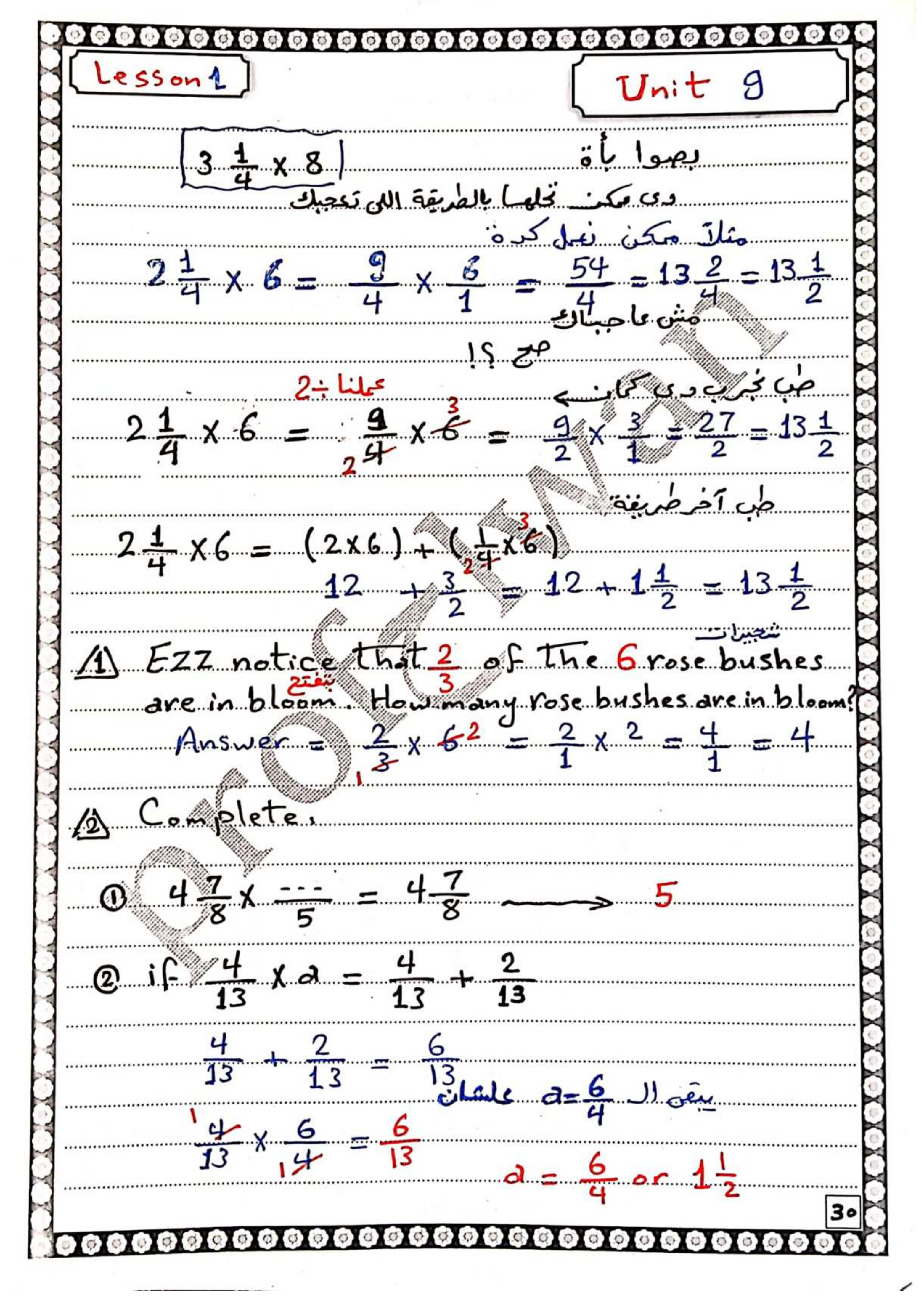
$1\frac{1}{4} \times 3 = 3 + \frac{3}{4} = 3\frac{3}{4}$

* كمان فى طريقة خامسة *

Distributive Property اسمها

$1\frac{1}{4} \times 3 = (1 + \frac{1}{4}) \times 3 = 1 \times 3 + \frac{1}{4} \times 3$

$= 3 + \frac{3}{4} = 3\frac{3}{4}$



Lesson 1

Unit 9

$3\frac{1}{4} \times 8$

بصوا بأة
دى ممكن تحلها بالطريقة اللى تعجبك
مثلاً ممكن نعمل كدة

$2\frac{1}{4} \times 6 = \frac{9}{4} \times \frac{6}{1} = \frac{54}{4} = 13\frac{2}{4} = 13\frac{1}{2}$

مش عاجباك
صح ؟!

طب نجرب دى كمان ←

عملنا ÷2

$2\frac{1}{4} \times 6 = \frac{9}{4} \times 6 = \frac{9}{2} \times \frac{3}{1} = \frac{27}{2} = 13\frac{1}{2}$

طب آخر طريقة

$2\frac{1}{4} \times 6 = (2 \times 6) + (\frac{1}{4} \times 6)$

$12 + \frac{3}{2} = 12 + 1\frac{1}{2} = 13\frac{1}{2}$

(1) Ezz notice that $\frac{2}{3}$ of the 6 rose bushes (شجيرات) are in bloom (تتفتح). How many rose bushes are in bloom?

Answer $= \frac{2}{3} \times 6 = \frac{2}{1} \times 2 = \frac{4}{1} = 4$

(2) Complete.

① $4\frac{7}{8} \times \frac{---}{5} = 4\frac{7}{8}$ ⟶ 5

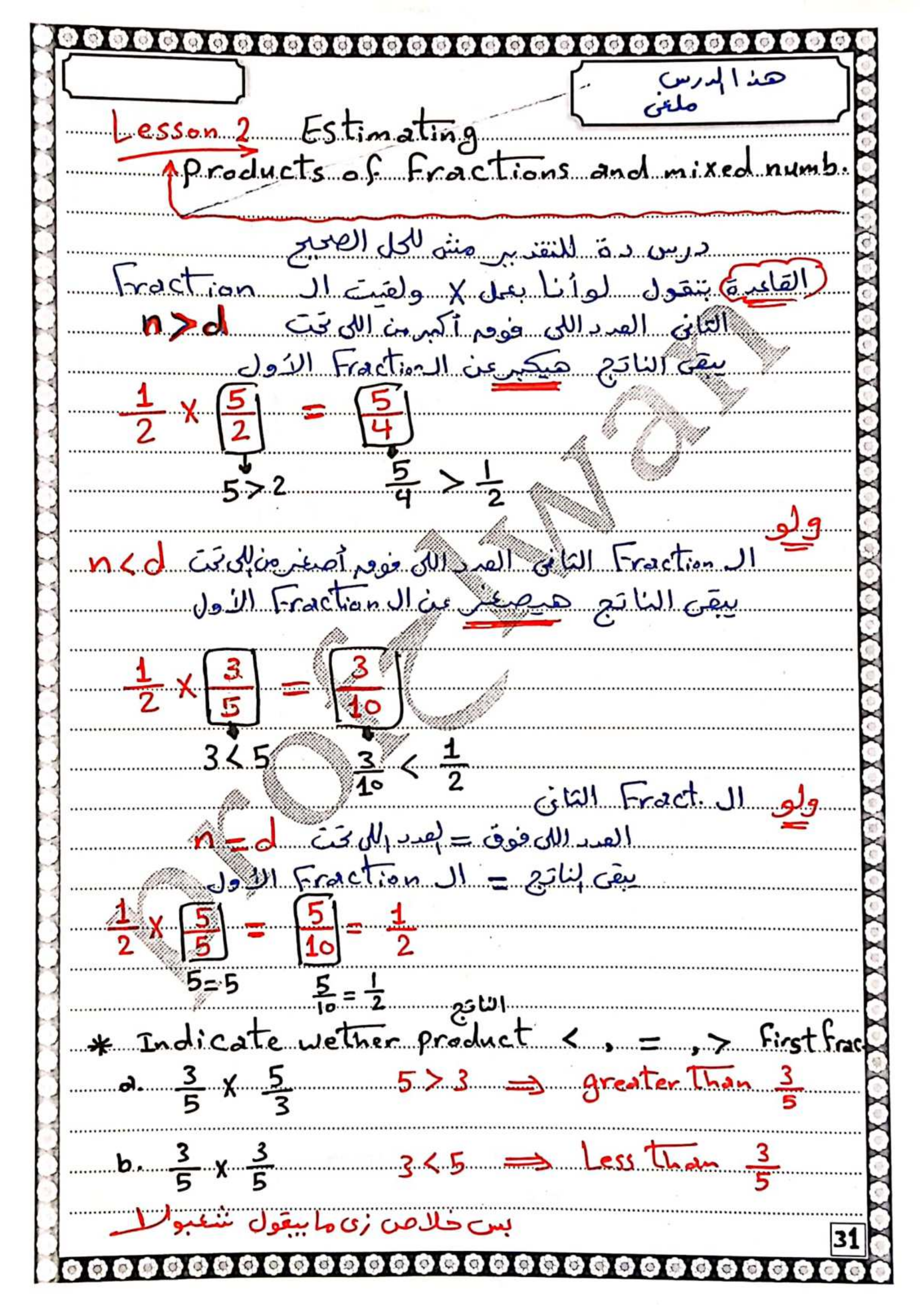
② if $\frac{4}{13} \times a = \frac{4}{13} + \frac{2}{13}$

$\frac{4}{13} + \frac{2}{13} = \frac{6}{13}$

يبقى ال $a = \frac{6}{4}$ علشان

$\frac{4}{13} \times \frac{6}{4} = \frac{6}{13}$

$a = \frac{6}{4}$ or $1\frac{1}{2}$



هذا الدرس ملغى

Lesson 2 Estimating Products of fractions and mixed numb.

درس دة للتقدير منه للحل الصحيح

القاعدة بتقول لو انا بعمل x ولقيت ال Fraction
التاني العدد اللي فوق أكبر من اللي تحت $n > d$
يبقى الناتج هيكبر عن ال Fraction الأول

$$\frac{1}{2} \times \frac{5}{2} = \frac{5}{4}$$

$5 > 2$ $\quad \frac{5}{4} > \frac{1}{2}$

ولو ال Fraction التاني العدد اللي فوق أصغر من اللي تحت $n < d$
يبقى الناتج هيصغر عن ال Fraction الأول

$$\frac{1}{2} \times \frac{3}{5} = \frac{3}{10}$$

$3 < 5$ $\quad \frac{3}{10} < \frac{1}{2}$

ولو ال Fract. التاني
العدد اللي فوق = العدد اللي تحت $n = d$
يبقى الناتج = ال Fraction الأول

$$\frac{1}{2} \times \frac{5}{5} = \frac{5}{10} = \frac{1}{2}$$

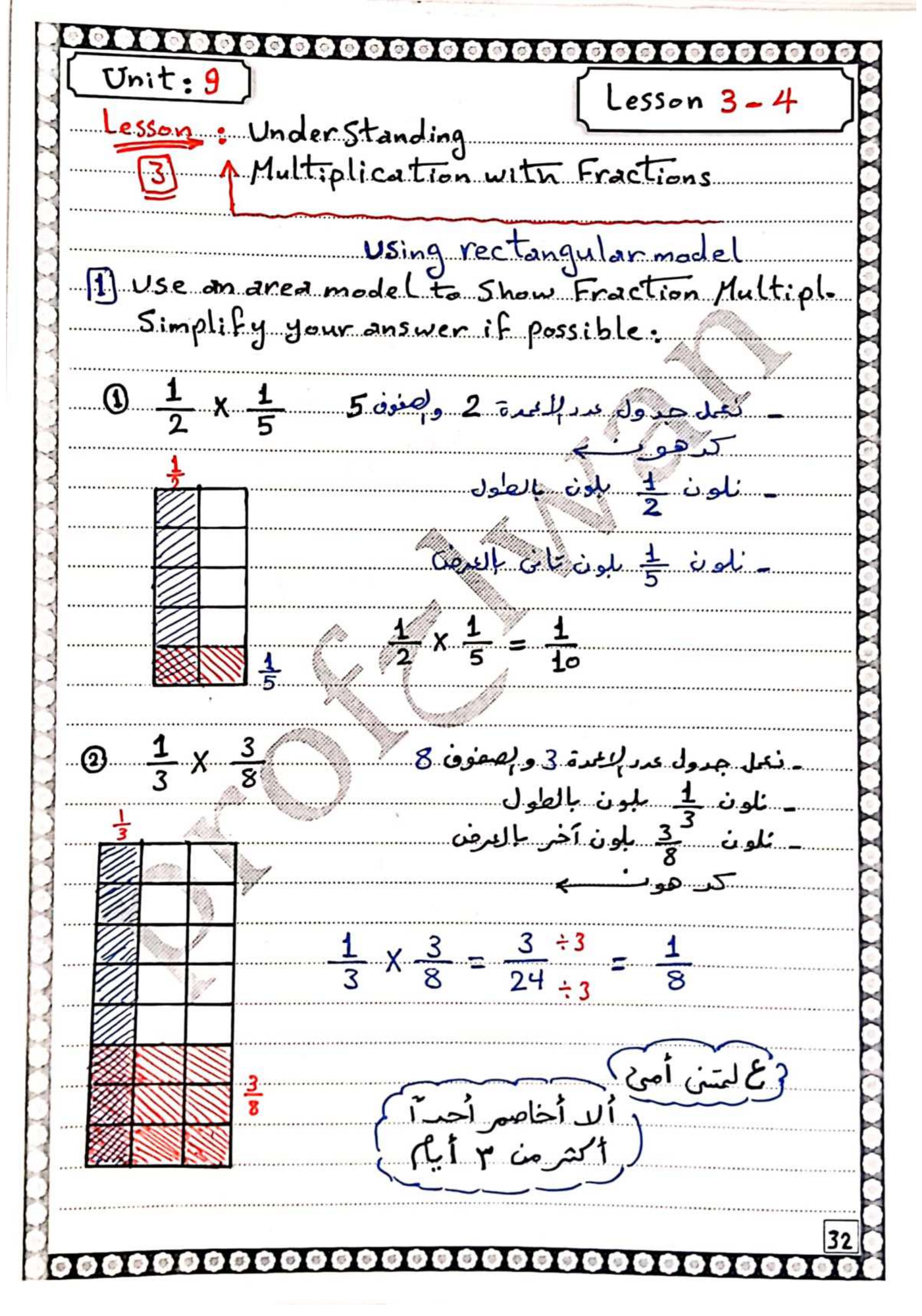
$5 = 5$ $\quad \frac{5}{10} = \frac{1}{2}$

* Indicate wether product (الناتج) <, =, > first frac

a. $\frac{3}{5} \times \frac{5}{3}$ $\quad 5 > 3 \Rightarrow$ greater Than $\frac{3}{5}$

b. $\frac{3}{5} \times \frac{3}{5}$ $\quad 3 < 5 \Rightarrow$ Less Than $\frac{3}{5}$

بس خلاص زى مابيقول شعبولا



Unit: 9

Lesson 3 - 4

Lesson 3 : Understanding Multiplication with Fractions

Using rectangular model

1 Use an area model to Show Fraction Multipl.
Simplify your answer if possible.

① $\frac{1}{2} \times \frac{1}{5}$

- نعمل جدول عدد الأعمدة 2 والصفوف 5
كدهون ←
- نلون $\frac{1}{2}$ بلون بالطول
- نلون $\frac{1}{5}$ بلون تاني بالعرض

$\frac{1}{2}$

$\frac{1}{5}$

$$\frac{1}{2} \times \frac{1}{5} = \frac{1}{10}$$

② $\frac{1}{3} \times \frac{3}{8}$

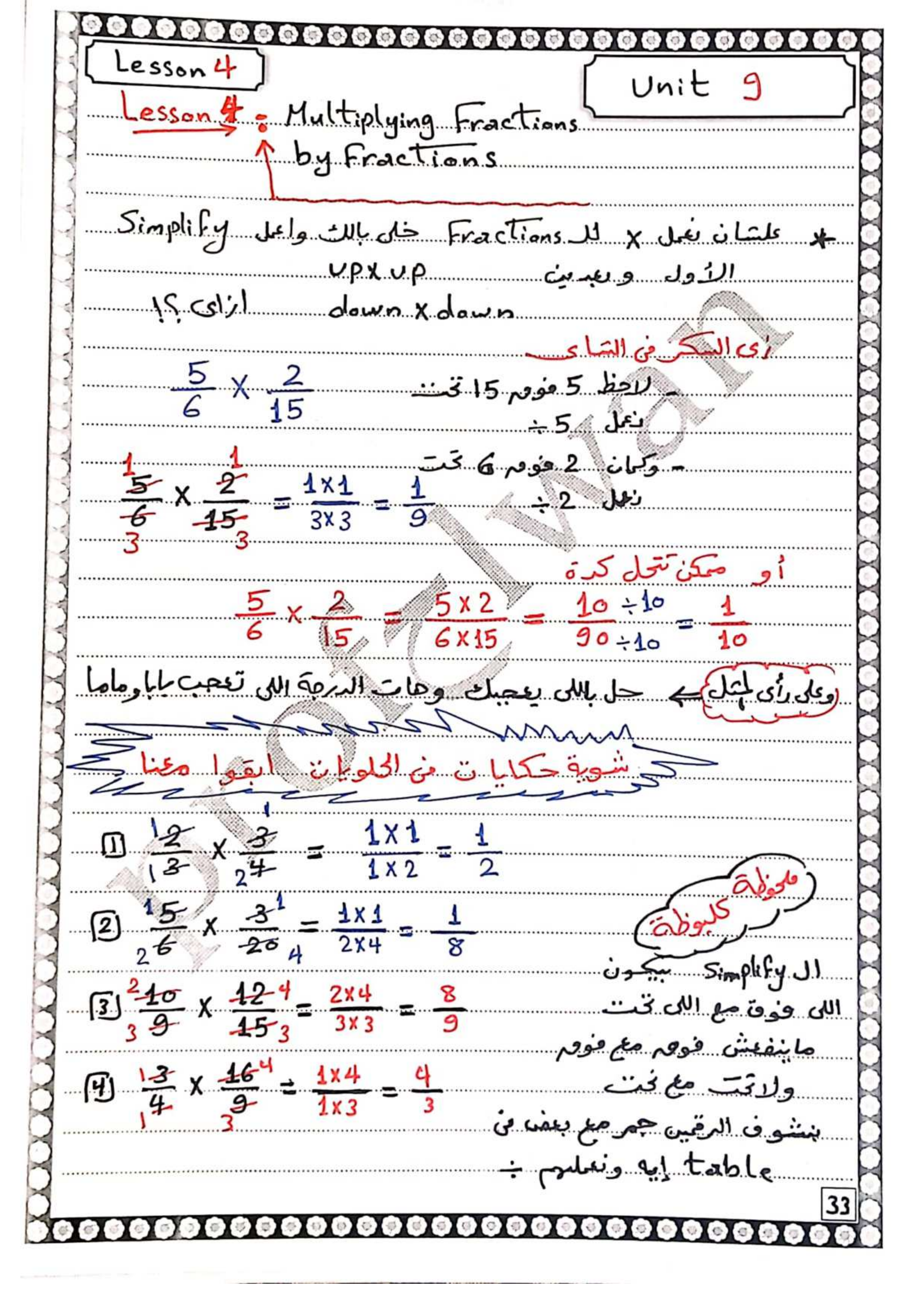
- نعمل جدول عدد الأعمدة 3 والصفوف 8
- نلون $\frac{1}{3}$ بلون بالطول
- نلون $\frac{3}{8}$ بلون آخر بالعرض
كدهون ←

$\frac{1}{3}$

$\frac{3}{8}$

$$\frac{1}{3} \times \frac{3}{8} = \frac{3 \div 3}{24 \div 3} = \frac{1}{8}$$

علمتني أمي
ألا أخاصم أحداً أكثر من ٣ أيام



Lesson 4

Unit 9

Lesson 4 : Multiplying Fractions by Fractions

* علشان نعمل × لل Fractions خلى بالك واعمل Simplify
الأول وبعدين up × up
down × down ازاى ؟!

زى السكر فى الشاى

$\frac{5}{6} \times \frac{2}{15}$

- لاحظ 5 فوق 15 تحت
نعمل ÷ 5
- وكمان 2 فوق 6 تحت
نعمل ÷ 2

$\frac{\cancel{5}^{1}}{\cancel{6}_{3}} \times \frac{\cancel{2}^{1}}{\cancel{15}_{3}} = \frac{1 \times 1}{3 \times 3} = \frac{1}{9}$

أو ممكن تتحل كدة

$\frac{5}{6} \times \frac{2}{15} = \frac{5 \times 2}{6 \times 15} = \frac{10 \div 10}{90 \div 10} = \frac{1}{10}$

وعلى رأى المثل ⟸ حل باللى يعجبك وهات الدرجة اللى تعجب بابا وماما

شوية حكايات من الحلويات ابقوا معنا

1. $\frac{\cancel{2}^{1}}{\cancel{3}_{1}} \times \frac{\cancel{3}^{1}}{\cancel{4}_{2}} = \frac{1 \times 1}{1 \times 2} = \frac{1}{2}$

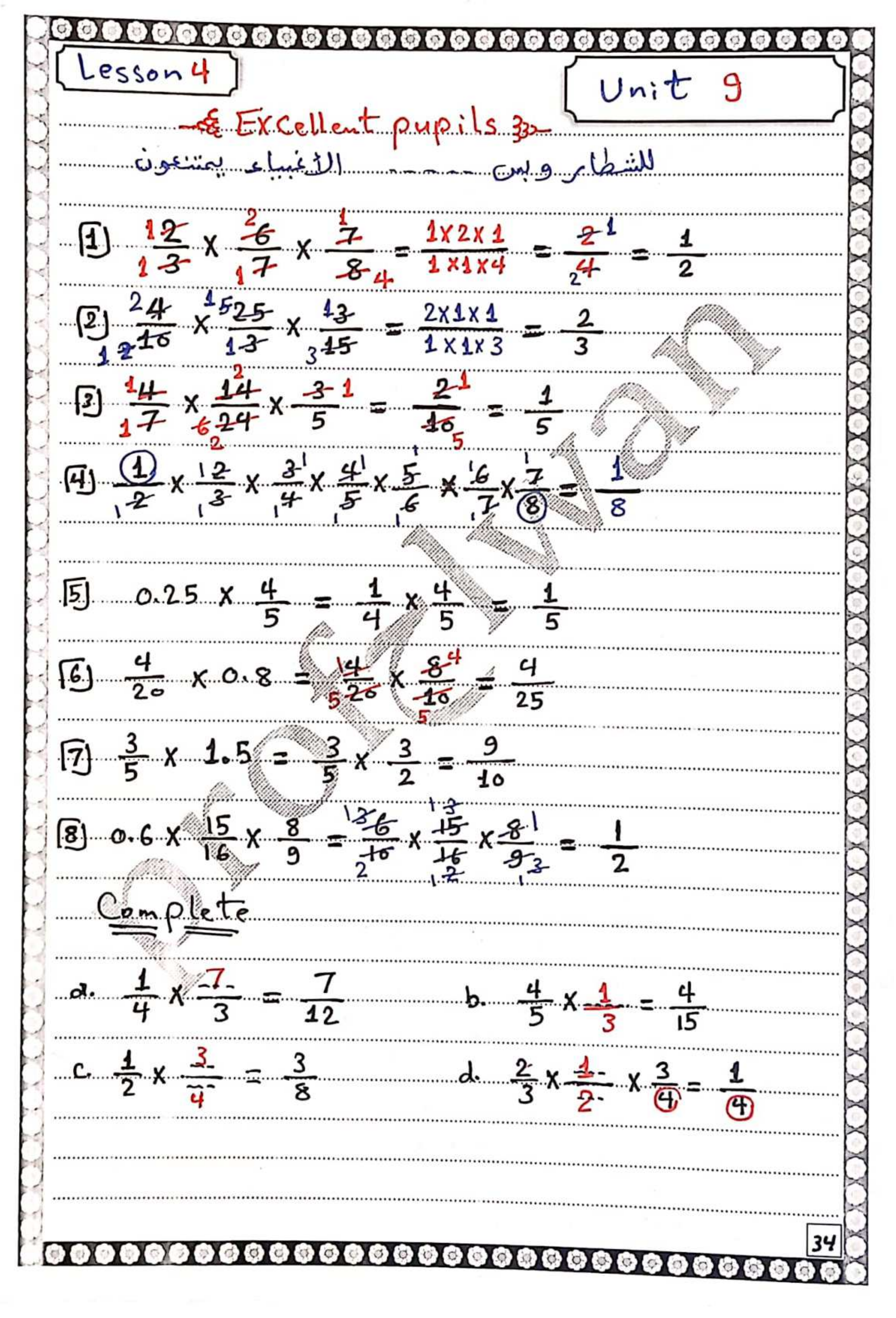
2. $\frac{\cancel{5}^{1}}{\cancel{6}_{2}} \times \frac{\cancel{3}^{1}}{\cancel{20}_{4}} = \frac{1 \times 1}{2 \times 4} = \frac{1}{8}$

3. $\frac{\cancel{10}^{2}}{\cancel{9}_{3}} \times \frac{\cancel{12}^{4}}{\cancel{15}_{3}} = \frac{2 \times 4}{3 \times 3} = \frac{8}{9}$

4. $\frac{\cancel{3}^{1}}{\cancel{4}_{1}} \times \frac{\cancel{16}^{4}}{\cancel{9}_{3}} = \frac{1 \times 4}{1 \times 3} = \frac{4}{3}$

ملحوظة كلبوظة

ال Simplify بيكون
اللى فوق مع اللى تحت
ماينفعش فوق مع فوق
ولا تحت مع تحت
بنشوف الرقمين جم مع بعض فى
table إيه ونعملهم ÷



Excellent pupils

للشطار وبس ------ الأغبياء يمتنعون

1. $\frac{2}{3} \times \frac{6}{7} \times \frac{7}{8} = \frac{1 \times 2 \times 1}{1 \times 1 \times 4} = \frac{2}{4} = \frac{1}{2}$

2. $\frac{4}{10} \times \frac{25}{13} \times \frac{13}{15} = \frac{2 \times 1 \times 1}{1 \times 1 \times 3} = \frac{2}{3}$

3. $\frac{4}{7} \times \frac{14}{24} \times \frac{3}{5} = \frac{2}{10} = \frac{1}{5}$

4. $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \frac{4}{5} \times \frac{5}{6} \times \frac{6}{7} \times \frac{7}{8} = \frac{1}{8}$

5. $0.25 \times \frac{4}{5} = \frac{1}{4} \times \frac{4}{5} = \frac{1}{5}$

6. $\frac{4}{20} \times 0.8 = \frac{4}{20} \times \frac{8}{10} = \frac{4}{25}$

7. $\frac{3}{5} \times 1.5 = \frac{3}{5} \times \frac{3}{2} = \frac{9}{10}$

8. $0.6 \times \frac{15}{16} \times \frac{8}{9} = \frac{6}{10} \times \frac{15}{16} \times \frac{8}{9} = \frac{1}{2}$

Complete

a. $\frac{1}{4} \times \frac{7}{3} = \frac{7}{12}$

b. $\frac{4}{5} \times \frac{1}{3} = \frac{4}{15}$

c. $\frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$

d. $\frac{2}{3} \times \frac{1}{2} \times \frac{3}{4} = \frac{1}{4}$

Unit: 9

Lessons 5-6-7

Lesson 5 Multiplying a mixed number by fraction or mixed number.

(1) $3\frac{4}{7} \times \frac{1}{5}$

الطريقة الاولى

$(3 + \frac{4}{7}) \times \frac{1}{5}$

$(3 \times \frac{1}{5}) + (\frac{4}{7} \times \frac{1}{5})$

$\frac{3 \times 7}{5 \times 7} + \frac{4}{35}$

$\frac{21}{35} + \frac{4}{35} = \frac{25}{35} = \frac{5}{7}$

Distributive property

الطريقة الثانية

$\frac{25}{7} \times \frac{1}{5}$

$\frac{5 \times 1}{7 \times 1} = \frac{5}{7}$

حلوة أهى وزى الفل اسهل

improper fraction

(2) $5\frac{1}{3} \times 2\frac{5}{8}$

$(5 + \frac{1}{3}) \times (2 + \frac{5}{8})$

$(5 \times 2) + (5 \times \frac{5}{8}) + (\frac{1}{3} \times 2) + (\frac{1}{3} \times \frac{5}{8})$

$10 + \frac{25 \times 3}{8 \times 3} + \frac{2 \times 8}{3 \times 8} + \frac{5}{24}$

$10 + \frac{75}{24} + \frac{16}{24} + \frac{5}{24}$

$10 + \frac{96}{24} = 10 + 4 = 14$

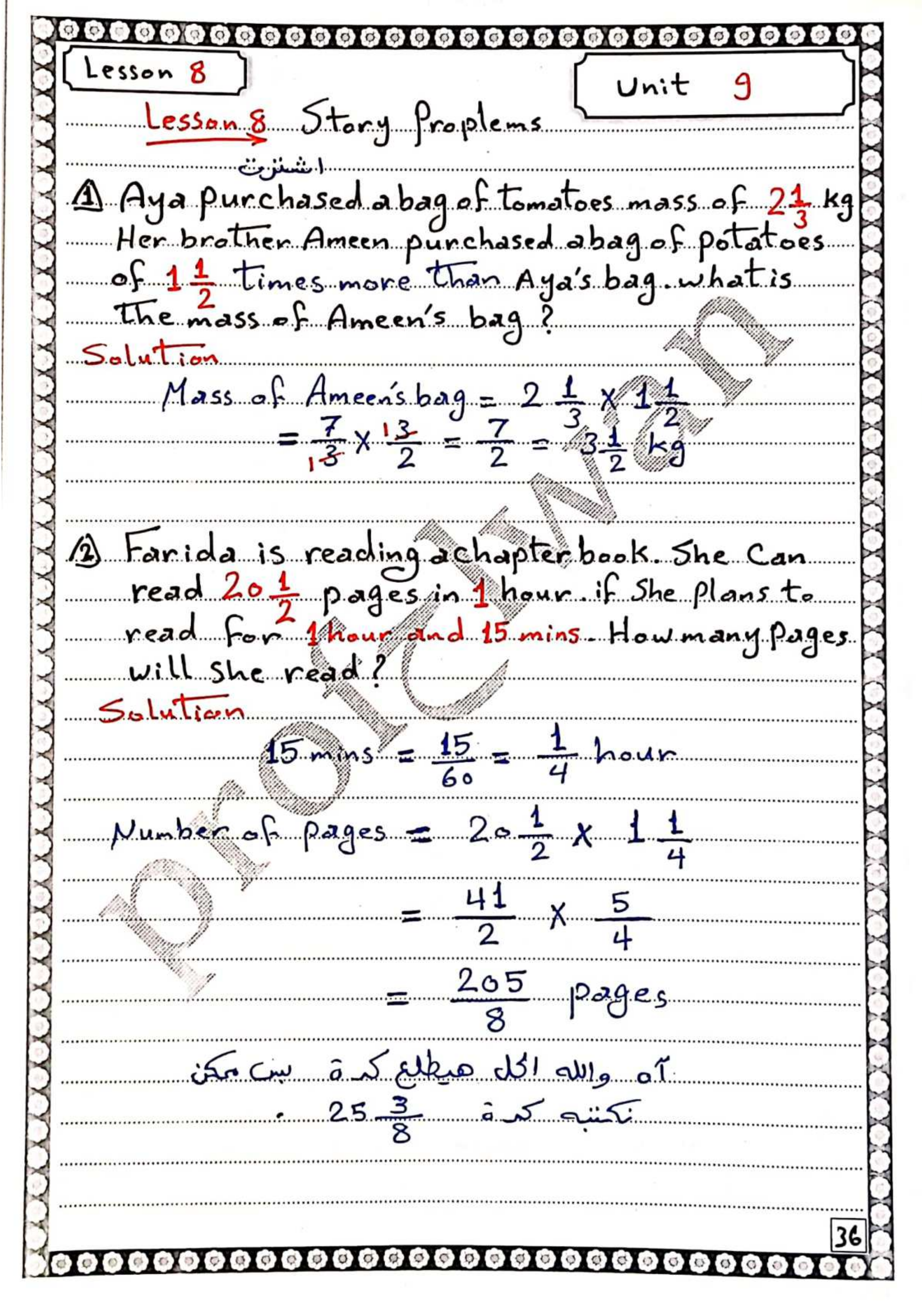
(2) $5\frac{1}{3} \times 2\frac{5}{8}$

$\frac{16}{3} \times \frac{21}{8}$

$\frac{2 \times 7}{1 \times 1} = \frac{14}{1} = 14$

شوف كل دة أد ايه و دة أد ايه

اخص على دى مسألة لبهكرة



Lesson 8

Unit 9

Lesson 8 → Story Proplems

اشترت

① Aya purchased a bag of tomatoes mass of $2\frac{1}{3}$ kg
Her brother Ameen purchased a bag of potatoes of $1\frac{1}{2}$ times more than Aya's bag. what is the mass of Ameen's bag ?

Solution

Mass of Ameen's bag $= 2\frac{1}{3} \times 1\frac{1}{2}$

$= \frac{7}{3} \times \frac{3}{2} = \frac{7}{2} = 3\frac{1}{2}$ kg

② Farida is reading a chapter book. She can read $20\frac{1}{2}$ pages in 1 hour. if she plans to read for 1 hour and 15 mins. How many pages will she read ?

Solution

15 mins $= \frac{15}{60} = \frac{1}{4}$ hour

Number of pages $= 20\frac{1}{2} \times 1\frac{1}{4}$

$= \frac{41}{2} \times \frac{5}{4}$

$= \frac{205}{8}$ pages

آه والله الكل هيطلع كدة بس ممكن
نكتبه كدة $25\frac{3}{8}$.

Lessons 9-10

Fractions as Division

Story problems involving fractions as Division

*** Division Algorithm**

$8 \div 5 = 1\frac{3}{5}$

$$\begin{array}{r} 1 \\ 5\overline{)\,8} \\ -5 \\ \hline 3 \end{array}$$

$3 \div 2 = 1\frac{1}{2}$

$$\begin{array}{r} 1 \\ 2\overline{)\,3} \\ -2 \\ \hline 1 \end{array}$$

[1] The price of 7 pens is 13 L.E. Find The Price of each pen?

$$\begin{array}{r} 1 \\ 7\overline{)\,13} \\ -7 \\ \hline 6 \end{array}$$

$13 \div 7 = 1\frac{6}{7}$ L.E

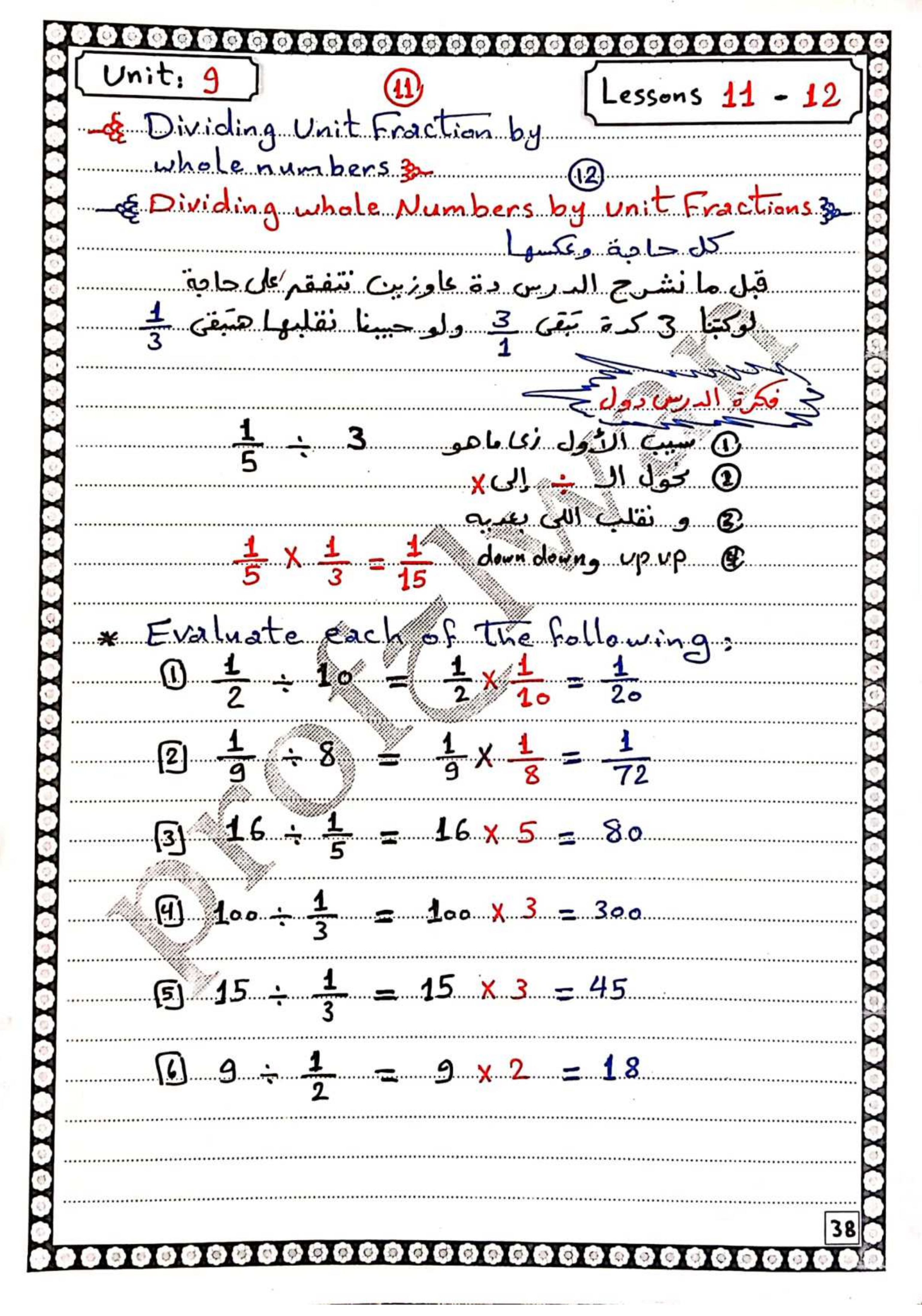
[2] Ali ran 20 Km in 90 mins. How many Kilometers per minute did he run?

He ran $= 20 \div 90 = \frac{2}{9}$ Km per min.

[3] Shehab has 6 houseplants it took him 45 min to replant them. How long did it take him to replant each one.

$$\begin{array}{r} 7 \\ 6\overline{)\,45} \\ -42 \\ \hline 3 \end{array}$$

it takes $= 45 \div 6 = 7\frac{3}{6} = 7\frac{1}{2}$



Unit: 9

(11)

Lessons 11 - 12

Dividing Unit Fraction by whole numbers

(12)

Dividing whole Numbers by unit Fractions

كل حاجة وعكسها

قبل ما نشرح الدرس دة عاوزين نتفقم على حاجة

لوكتبنا 3 كدة تبقى $\frac{3}{1}$ ولو جيبنا نقلبها هتبقى $\frac{1}{3}$

فكرة الدرس دول

① سيب الأول زى ماهو

② تحول الـ ÷ إلى ×

③ و نقلب اللى بعديه

④ down down up up

$\frac{1}{5} \div 3$

$\frac{1}{5} \times \frac{1}{3} = \frac{1}{15}$

* Evaluate each of the following:

① $\frac{1}{2} \div 10 = \frac{1}{2} \times \frac{1}{10} = \frac{1}{20}$

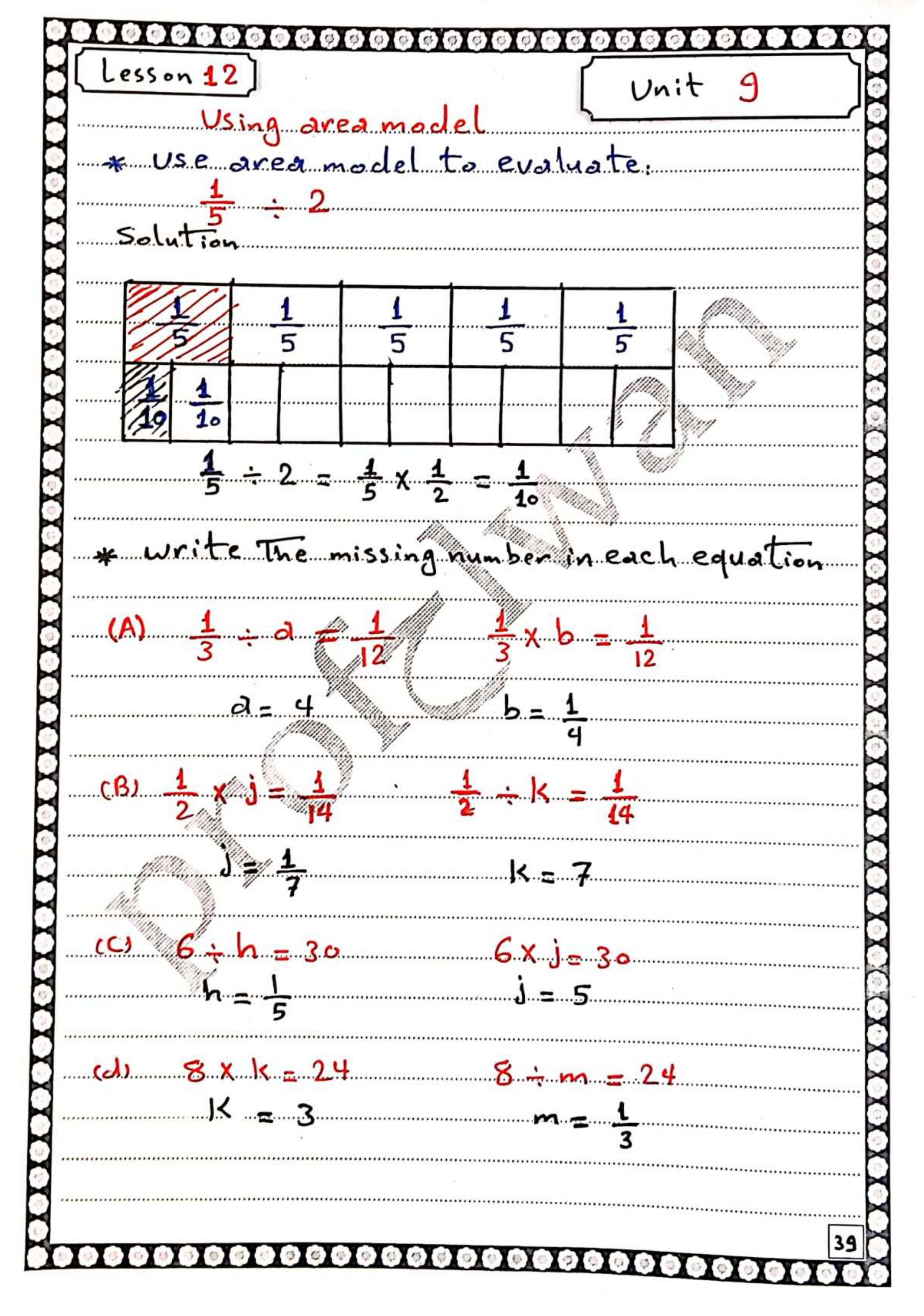
② $\frac{1}{9} \div 8 = \frac{1}{9} \times \frac{1}{8} = \frac{1}{72}$

③ $16 \div \frac{1}{5} = 16 \times 5 = 80$

④ $100 \div \frac{1}{3} = 100 \times 3 = 300$

⑤ $15 \div \frac{1}{3} = 15 \times 3 = 45$

⑥ $9 \div \frac{1}{2} = 9 \times 2 = 18$



Lesson 12

Unit 9

Using area model

* Use area model to evaluate:

$\frac{1}{5} \div 2$

Solution

$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$	
$\frac{1}{10}$	$\frac{1}{10}$								

$\frac{1}{5} \div 2 = \frac{1}{5} \times \frac{1}{2} = \frac{1}{10}$

* Write the missing number in each equation

(A) $\frac{1}{3} \div a = \frac{1}{12}$ $\qquad$ $\frac{1}{3} \times b = \frac{1}{12}$

$a = 4$ $\qquad$ $b = \frac{1}{4}$

(B) $\frac{1}{2} \times j = \frac{1}{14}$ $\qquad$ $\frac{1}{2} \div K = \frac{1}{14}$

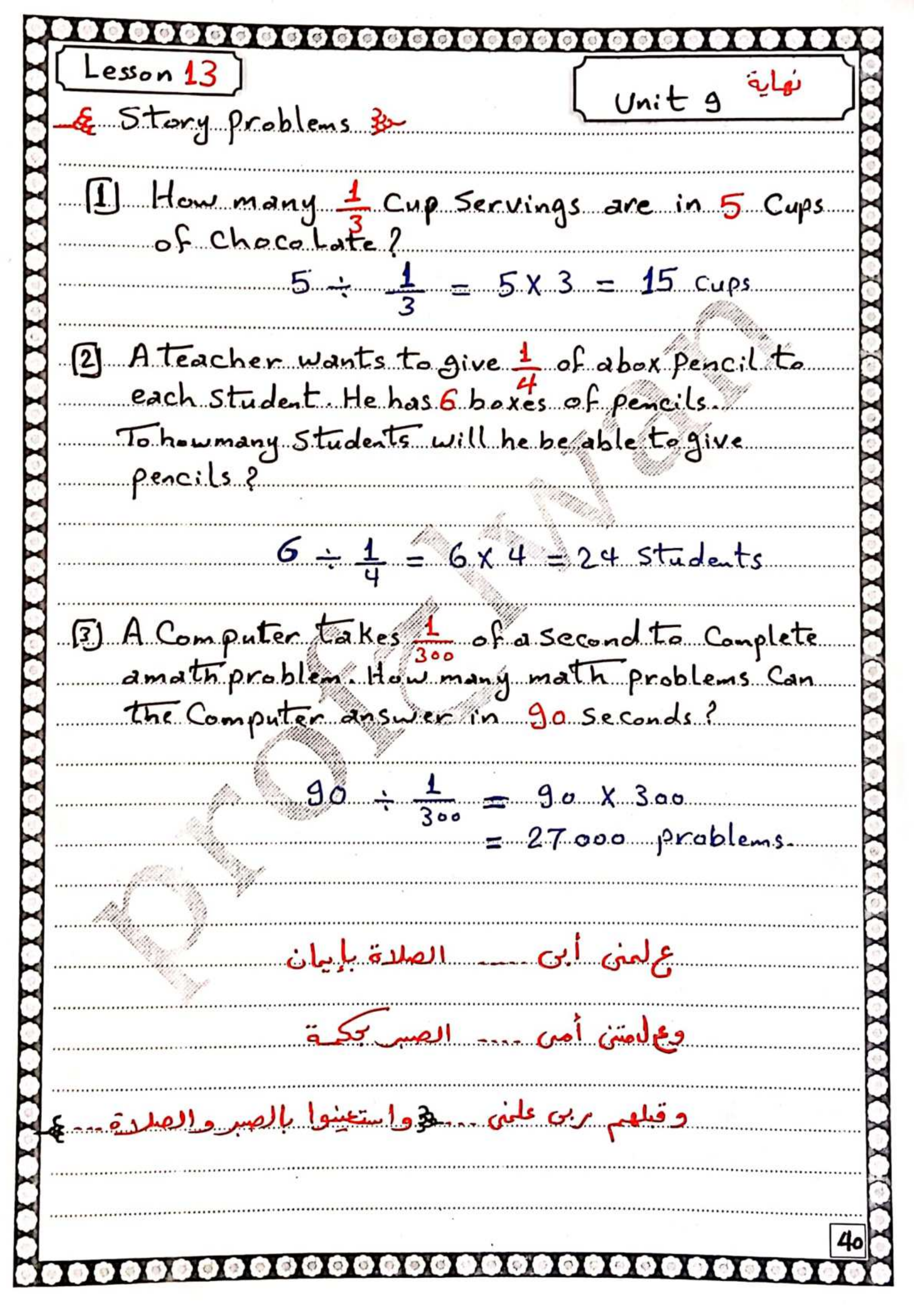
$j = \frac{1}{7}$ $\qquad$ $K = 7$

(C) $6 \div h = 30$ $\qquad$ $6 \times j = 30$

$h = \frac{1}{5}$ $\qquad$ $j = 5$

(d) $8 \times K = 24$ $\qquad$ $8 \div m = 24$

$K = 3$ $\qquad$ $m = \frac{1}{3}$



Lesson 13

Unit 9 نهاية

Story problems

1. How many $\frac{1}{3}$ Cup Servings are in 5 Cups of Chocolate?

$$5 \div \frac{1}{3} = 5 \times 3 = 15 \text{ cups}$$

2. A teacher wants to give $\frac{1}{4}$ of a box pencil to each student. He has 6 boxes of pencils. To how many students will he be able to give pencils?

$$6 \div \frac{1}{4} = 6 \times 4 = 24 \text{ Students}$$

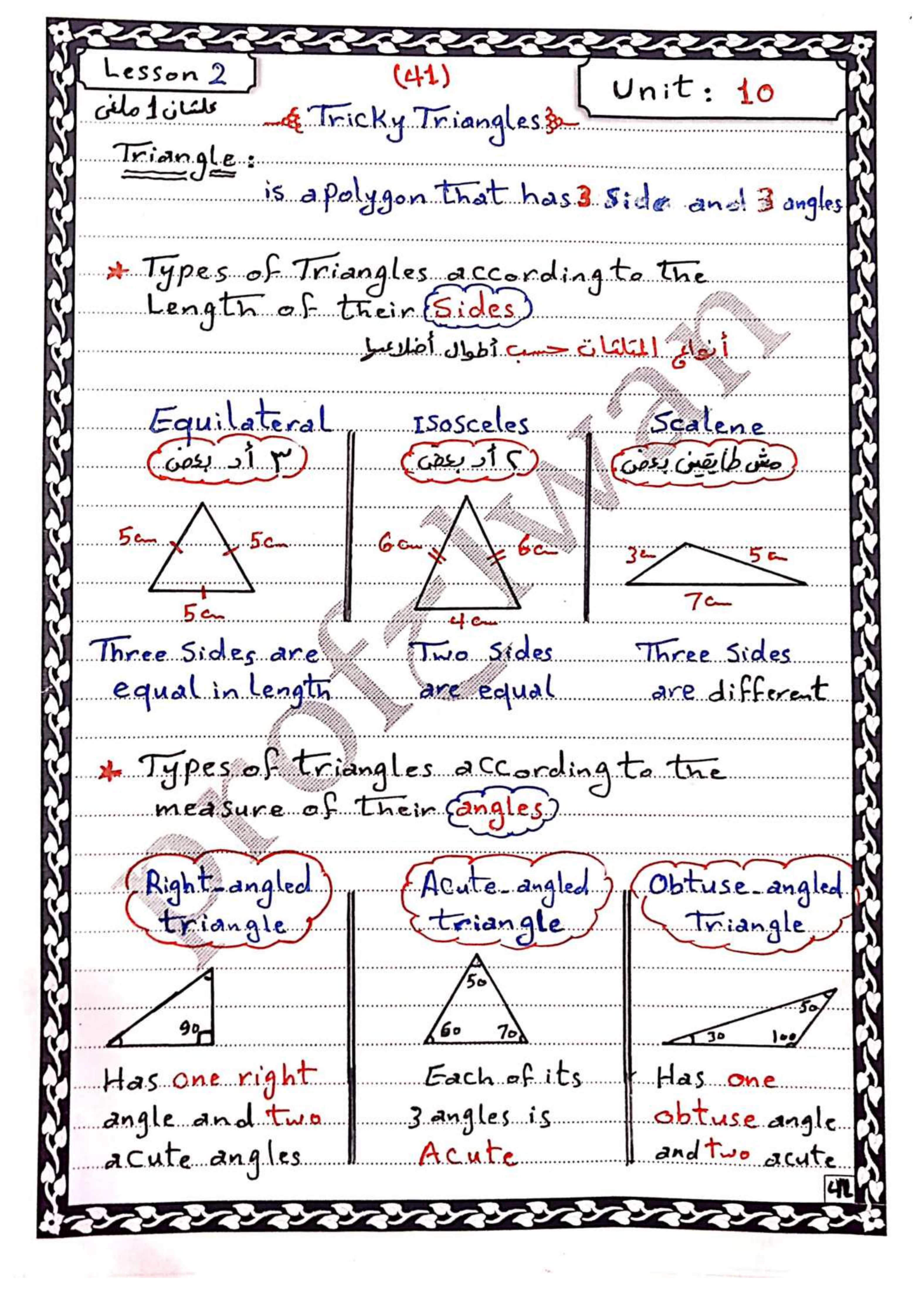
3. A Computer takes $\frac{1}{300}$ of a second to Complete a math problem. How many math problems Can the Computer answer in 90 seconds?

$$90 \div \frac{1}{300} = 90 \times 300$$
$$= 27.000 \text{ problems.}$$

علمني أبي ... الصلاة بإيمان

وعلمتني أمي ... الصبر بحكمة

وقبلهم ربي علمني ... واستعينوا بالصبر والصلاة ...



Lesson 2

(41)

Unit: 10

علشان 1 ملغي

Tricky Triangles

Triangle:
is a polygon that has 3 side and 3 angles

* Types of Triangles according to the Length of their Sides

أنواع المثلثات حسب أطوال أضلاعها

Equilateral	Isosceles	Scalene
٣ أد بعض	٢ أد بعض	مش طايقين بعض
5cm, 5cm, 5cm	6cm, 6cm, 4cm	3cm, 5cm, 7cm
Three sides are equal in length	Two sides are equal	Three sides are different

* Types of triangles according to the measure of their angles

Right-angled triangle	Acute-angled triangle	Obtuse-angled Triangle
90	50, 60, 70	30, 100, 50
Has one right angle and two acute angles	Each of its 3 angles is Acute	Has one obtuse angle and two acute

ملحوظة كلبوظة

Any triangle has at least two acute angles

[1] Determine type of triangle :-

① $m(\angle E) = 30^\circ$, $m(\angle F) = 90^\circ$ and $m(\angle G) = 60^\circ$

نشوف أكبر angle كام ؟! لو كانت

Obtuse ⟵ أكبر من 90° يبقى مثلث

Acute ⟵ أقل من 90° يبقى مثلث

Right ⟵ تساوى 90° يبقى مثلث

وعلشان أكبر angle هنا 90° يبقى مثلث

Right angled triangle

② $m(\angle A) = 30^\circ$, $m(\angle B) = 40^\circ$, $m(\angle C) = 110^\circ$

obtuse angled triangle

③ $m(\angle X) = m(\angle Y) = 70^\circ$, $m(\angle Z) = 40^\circ$

Acute angled triangle.

[2] Determine type of triangles according to their side lengths.

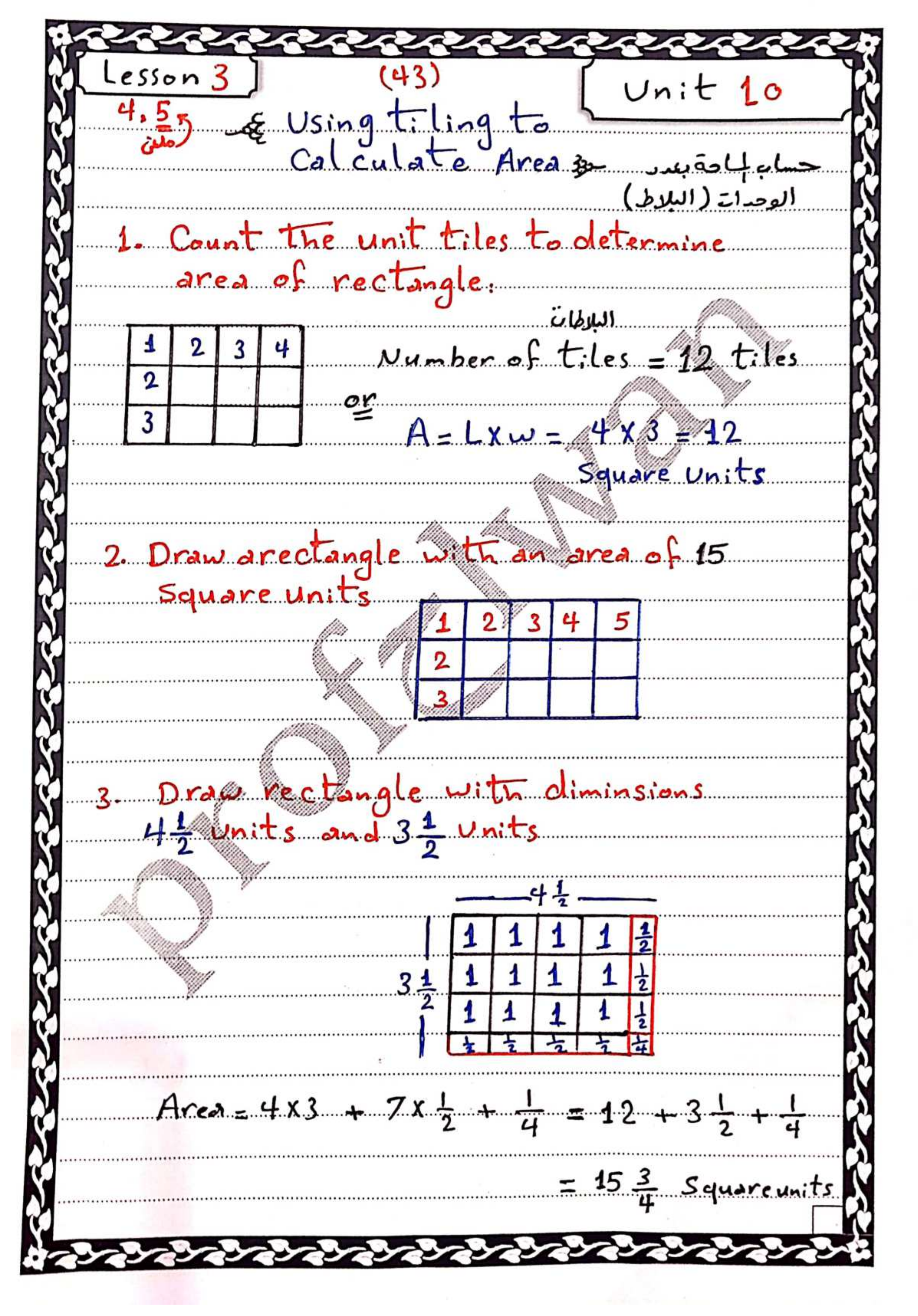
① $AB = 6.5$ cm , $BC = 7$ cm , $CA = 6.5$ cm

isosceles يبقى $AB = CA$ م أد بعض

② $AB = BC = CD = 5$ cm equilateral

③ $XY = 10$ cm $YZ = 7$ cm $XZ = \frac{1}{2} XY$

Scalene مش طابقين بعض $XY = 5$ cm يبقى



Lesson 3 (43) Unit 10

4, 5 (متن)

Using tiling to Calculate Area — حساب المساحة بعدد الوحدات (البلاط)

1. Count the unit tiles to determine area of rectangle.

1	2	3	4
2			
3			

البلاطات

Number of tiles = 12 tiles

or

$A = L \times w = 4 \times 3 = 12$ Square units

2. Draw a rectangle with an area of 15 Square units

1	2	3	4	5
2				
3				

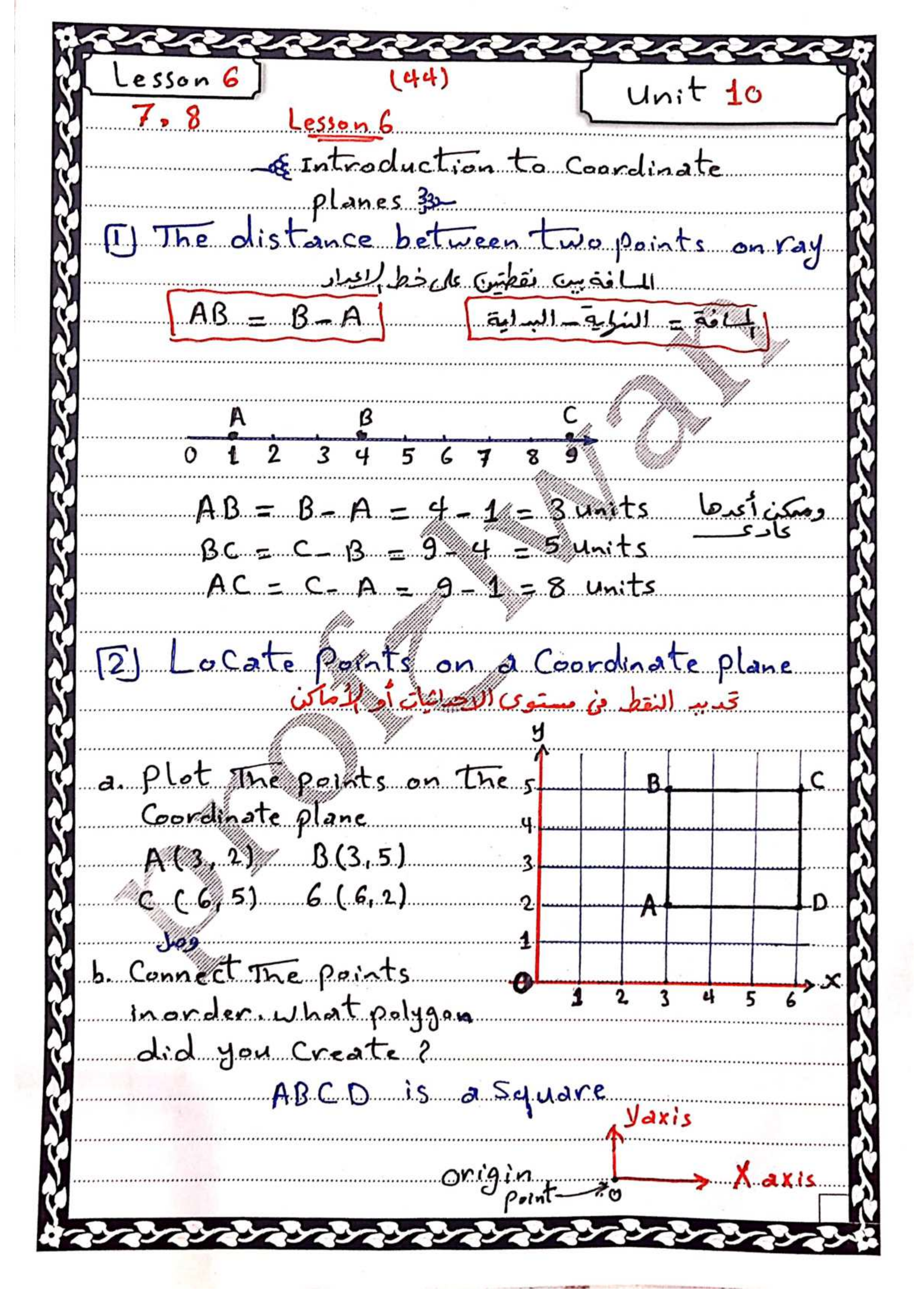
3. Draw rectangle with dimensions $4\frac{1}{2}$ units and $3\frac{1}{2}$ units

$4\frac{1}{2}$ (width), $3\frac{1}{2}$ (height)

1	1	1	1	$\frac{1}{2}$
1	1	1	1	$\frac{1}{2}$
1	1	1	1	$\frac{1}{2}$
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$

$$Area = 4 \times 3 + 7 \times \frac{1}{2} + \frac{1}{4} = 12 + 3\frac{1}{2} + \frac{1}{4}$$

$$= 15\frac{3}{4} \text{ Square units}$$



7, 8 Lesson 6

Introduction to Coordinate planes

1 The distance between two points on ray

المسافة بين نقطتين على خط الأعداد

| AB = B − A | | المسافة = النهاية − البداية |

AB = B − A = 4 − 1 = 3 units

BC = C − B = 9 − 4 = 5 units

AC = C − A = 9 − 1 = 8 units

وممكن أعدها كده

2 Locate Points on a Coordinate plane

تحديد النقط في مستوى الاحداثيات أو الأماكن

a. Plot The points on the Coordinate plane

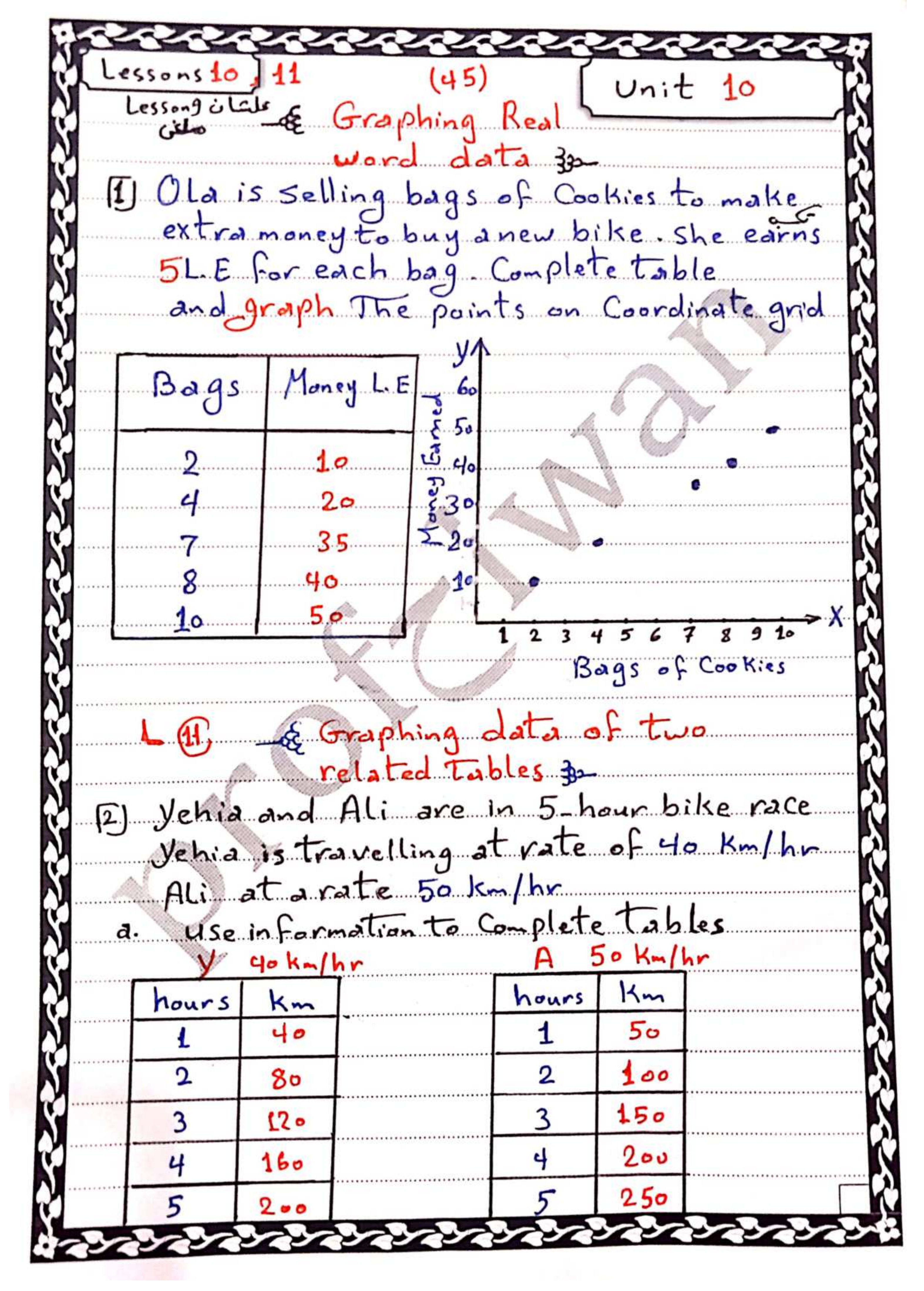
A (3, 2) B (3, 5)

C (6, 5) 6 (6, 2)

وصل

b. Connect The points inorder. what polygon did you Create?

ABCD is a Square



Lessons 10 , 11 (45) Unit 10

Lesson: Graphing Real word data

[1] Ola is selling bags of Cookies to make extra money to buy a new bike. She earns 5L.E for each bag. Complete table and graph The points on Coordinate grid

Bags	Money L.E
2	10
4	20
7	35
8	40
10	50

L 11 Graphing data of two related Tables

[2] Yehia and Ali are in 5-hour bike race. Yehia is travelling at rate of 40 Km/hr, Ali at a rate 50 Km/hr

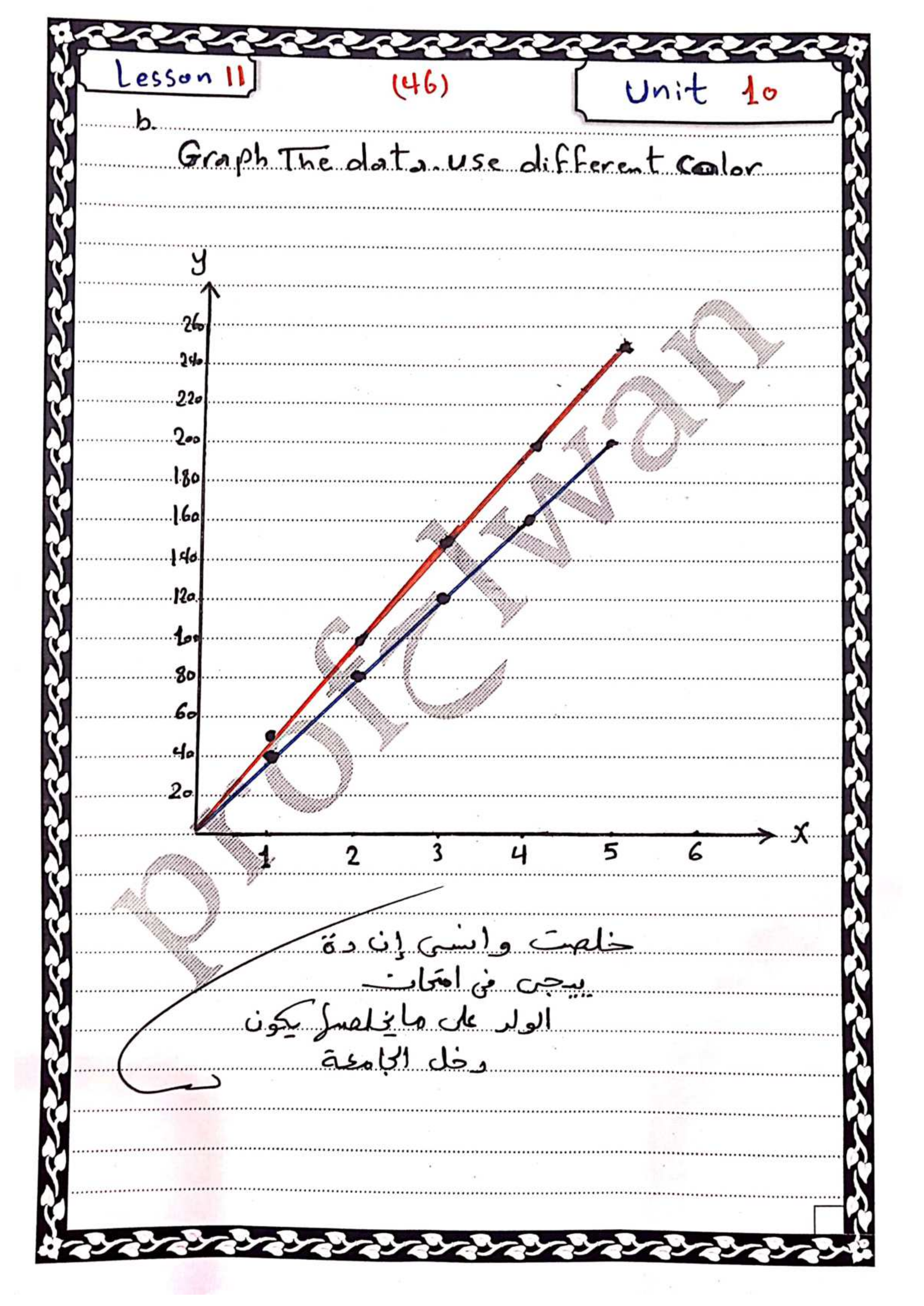
a. Use information to Complete tables

Y 40 km/hr

hours	Km
1	40
2	80
3	120
4	160
5	200

A 50 Km/hr

hours	Km
1	50
2	100
3	150
4	200
5	250


Lesson 11
(46)
Unit 10
b.
Graph The data. use different color
y
260
240
220
200
180
160
140
120
100
80
60
40
20
x
1
2
3
4
5
6
خلصت وانسى إن دة
بيجي في امتحانات
الولد على ما يخلص يكون
دخل الجامعة

Lesson 1,2 (47) Unit 11

Measuring a new Dimension

	3-D Shapes				
Name	picture	Face / base	Edges	vertices	Base
Cube		6	12	8	Square
Cuboid		6	12	8	Rec. Squ.
pyramid		5	8	5	Tri. Sq.
Cylinder		2	0	0	Circle
Cone		1	0	1	Circle
Sphere		0	0	0	No

Face : Flat Surface of Solid figure.

Edge : Linesegment formed where 2 Faces meet.

Vertix : point where three or more edges meet.

Vertix

Face

Edge

Who am I ?

a. I have no edges, no flat faces and no vertices. (Sphere)

b. I have 6 squared faces, 12 edges and 8 vertices. (Cube)

c. I have squared base, 5 faces, 8 edges and 5 vertices. (pyramid)

d. I have 2 circular base, no edges and no vertices. (Cylinder)

e. I have one circular base, one vertex and no edges. (Cone)

Choose

- The peices of cards △△△△□ can form

A. Cuboid B. Cube C. pyramid D. Cylinder

- In which of the fallowing you can find ▭ ?

A. Cube B. Sphere C. Rectangular prism D. Cylinder

Lessons 3,4 (49) Unit 11

Same Value Different Shapes

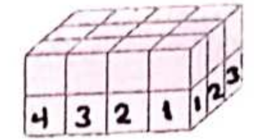
Volume = عدد المكعبات فى كل طبقة X عدد الطبقات

1. Complete, where the unit cube is 1 cm^3

a. 1. Number of horizontal layers = 2

2. Number of cubes in each horizontal layer = 12

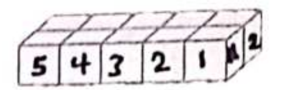
3. Volume = 2 × 12 = 24 cm^3



b. 1. Number of horizontal layers : 1

2. Number of cubes in each horizontal layer : 10

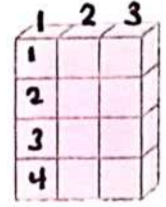
3. Volume = 1 × 10 = 10 cm^3



c. 1. Number of vertical slices : 3

2. Number of cubes in each vertical slice : 4

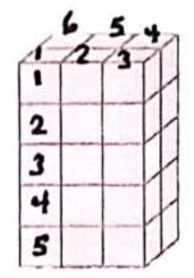
3. Volume = 3 × 4 = 12 cm^3



d. 1. Number of vertical slices : 6

2. Number of cubes in each vertical slice : 5

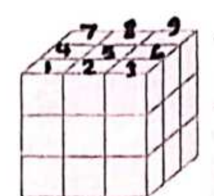
3. Volume = 6 × 5 = 30 cm^3

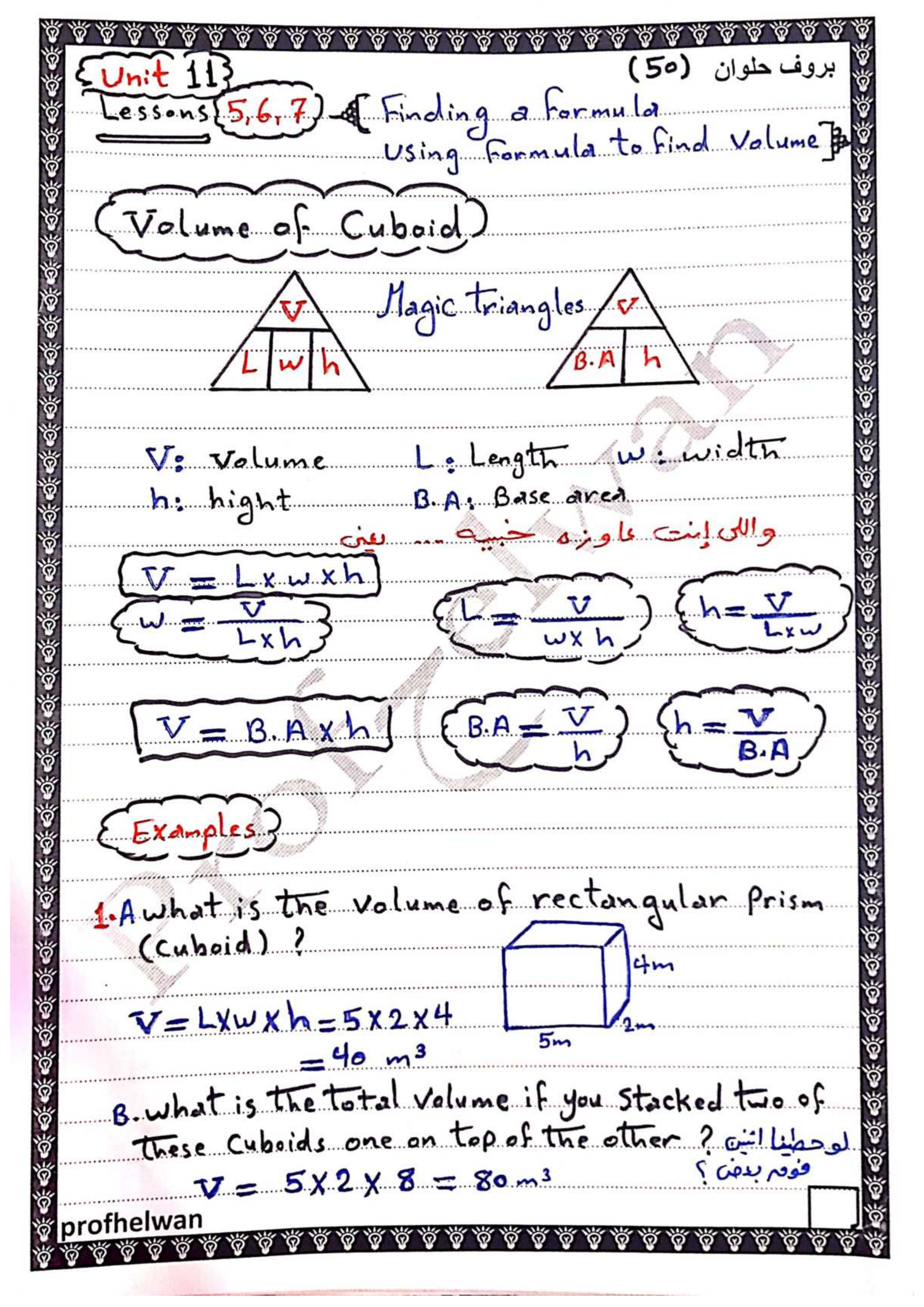


e. 1. Number of horizontal layers : 9

2. Number of cubes in each horizontal layer : 3

3. Volume = 9 × 3 = 27 cm^3





Lessons 5,6,7 — Finding a formula, Using formula to find Volume

Volume of Cuboid

Magic triangles

V: Volume L: Length w: width
h: hight B.A: Base area

واللى إنت عاوزه خبيه ... يعنى

$V = L \times w \times h$

$w = \frac{V}{L \times h}$ $L = \frac{V}{w \times h}$ $h = \frac{V}{L \times w}$

$V = B.A \times h$ $B.A = \frac{V}{h}$ $h = \frac{V}{B.A}$

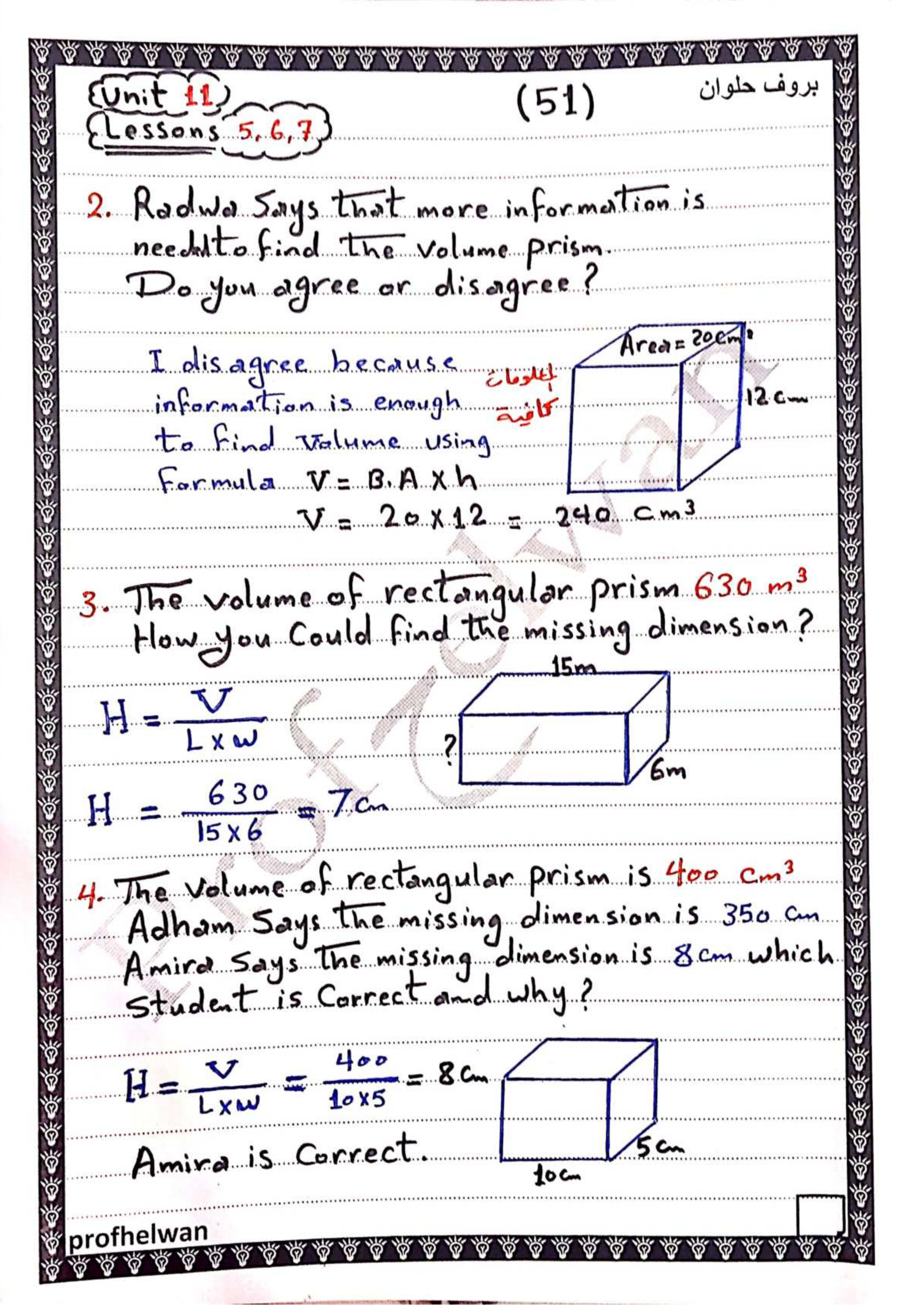
Examples

1. A what is the volume of rectangular prism (cuboid) ?

$V = L \times w \times h = 5 \times 2 \times 4$
$= 40\ m^3$

B. what is the total volume if you stacked two of these cuboids one on top of the other ? لو حطينا اتنين فوق بعض ؟

$V = 5 \times 2 \times 8 = 80\ m^3$



2. Radwa says that more information is needed to find the volume prism.
Do you agree or disagree?

I disagree because information is enough to find volume using formula $V = B.A \times h$

$V = 20 \times 12 = 240 \text{ cm}^3$

المعلومات كافية

3. The volume of rectangular prism 630 m^3
How you could find the missing dimension?

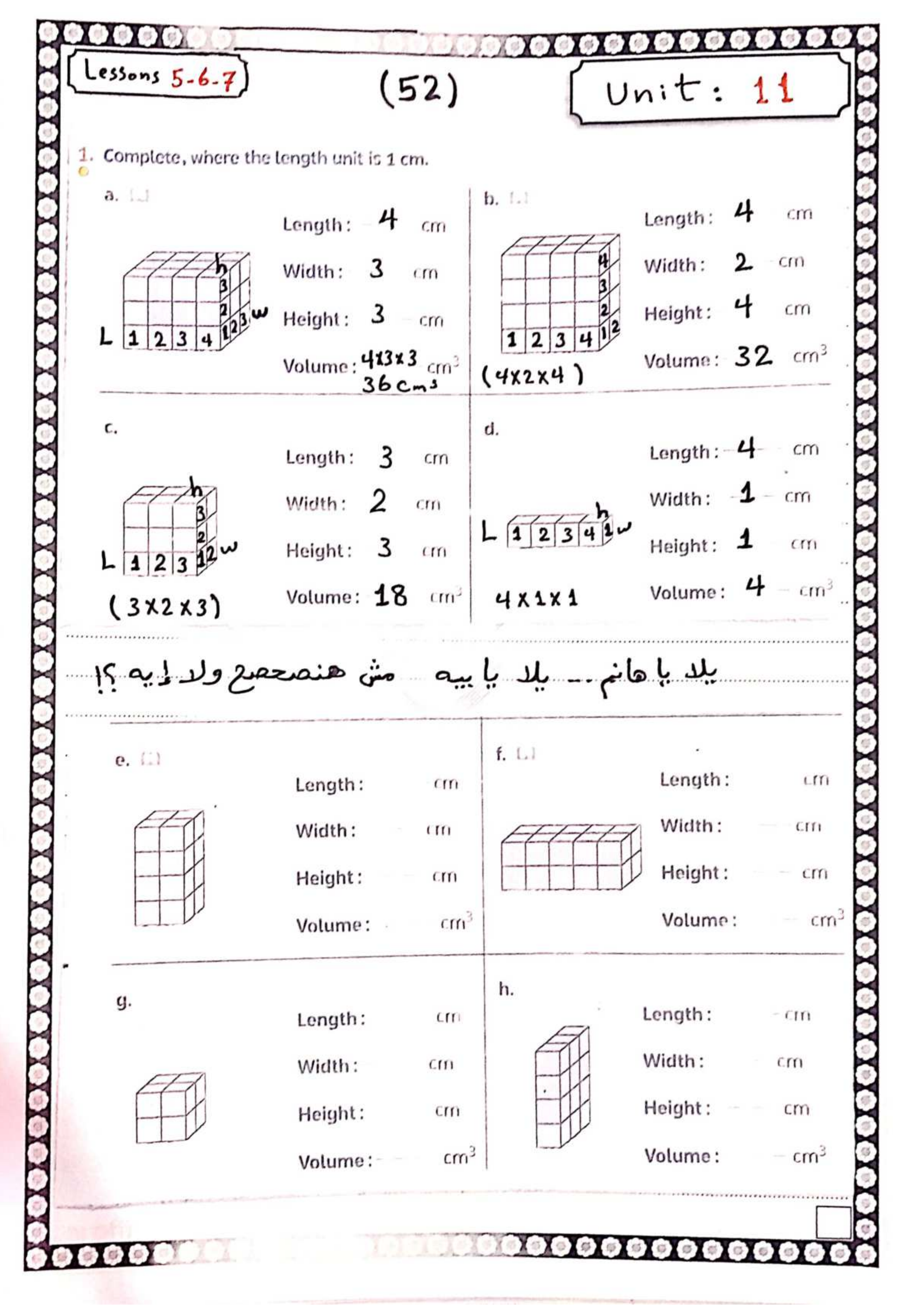
$$H = \frac{V}{L \times w}$$

$$H = \frac{630}{15 \times 6} = 7 \text{ cm}$$

4. The volume of rectangular prism is 400 cm^3
Adham says the missing dimension is 350 cm
Amira says the missing dimension is 8 cm which student is correct and why?

$$H = \frac{V}{L \times w} = \frac{400}{10 \times 5} = 8 \text{ cm}$$

Amira is correct.



Lessons 5-6-7

(52)

Unit: 11

1. Complete, where the length unit is 1 cm.

a.

Length: 4 cm

Width: 3 cm

Height: 3 cm

Volume: 4×3×3 cm³
36 cm³

b.

Length: 4 cm

Width: 2 cm

Height: 4 cm

Volume: 32 cm³

(4×2×4)

c.

Length: 3 cm

Width: 2 cm

Height: 3 cm

Volume: 18 cm³

(3×2×3)

d.

Length: 4 cm

Width: 1 cm

Height: 1 cm

Volume: 4 cm³

4×1×1

يلا يا هانم.. يلا يا بيه مش هنصحصح ولا إيه ؟!

e.

Length: cm

Width: cm

Height: cm

Volume: cm³

f.

Length: cm

Width: cm

Height: cm

Volume: cm³

g.

Length: cm

Width: cm

Height: cm

Volume: cm³

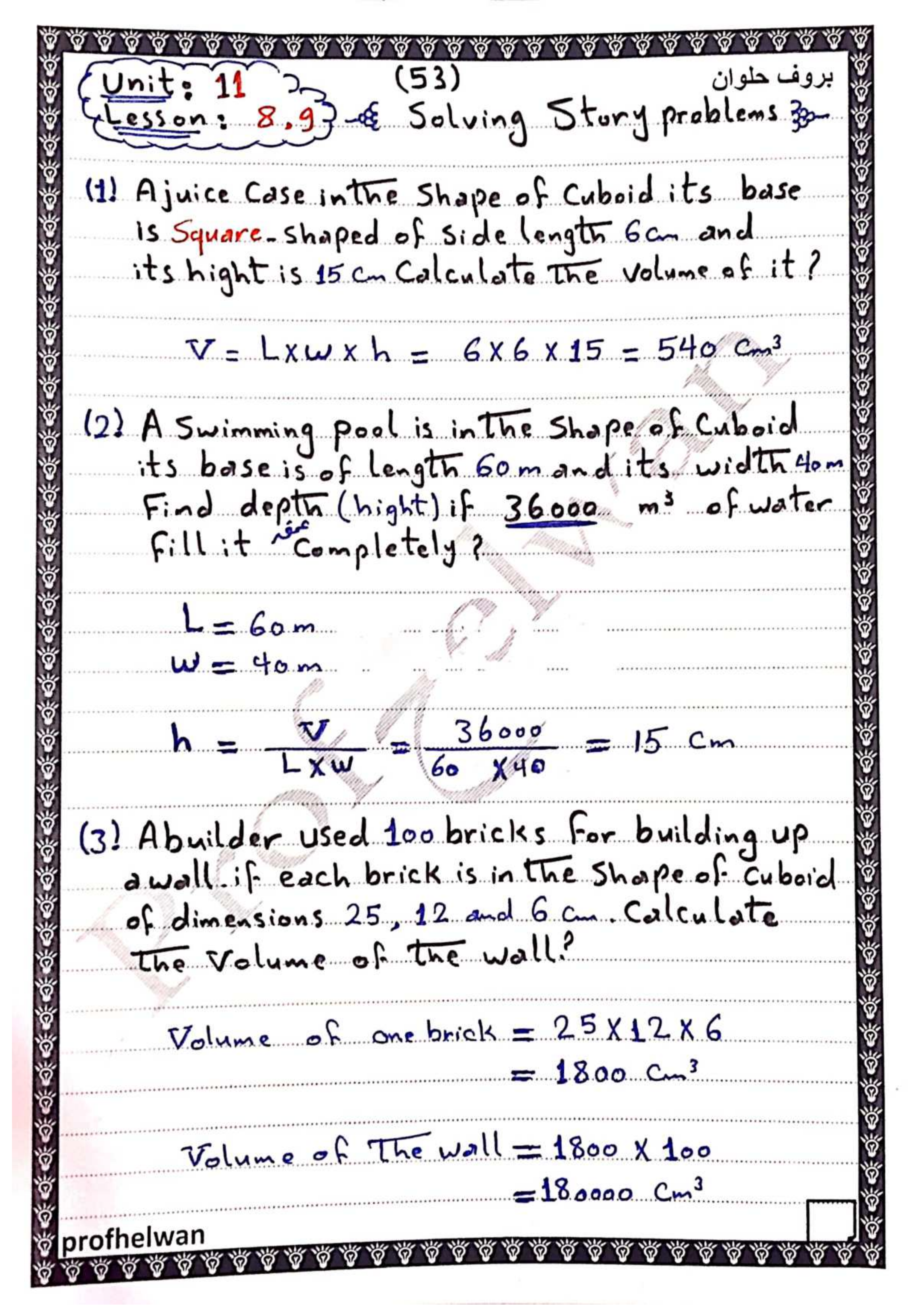
h.

Length: cm

Width: cm

Height: cm

Volume: cm³



Unit: 11 (53) بروف حلوان
Lesson: 8,9 Solving Story problems

(1) A juice case in the shape of cuboid its base is square-shaped of side length 6 cm and its hight is 15 cm. Calculate the volume of it?

$V = L \times w \times h = 6 \times 6 \times 15 = 540 \text{ cm}^3$

(2) A swimming pool is in the shape of cuboid its base is of length 60 m and its width 40 m. Find depth (hight) if 36000 m³ of water fill it عمق completely?

$L = 60 m$

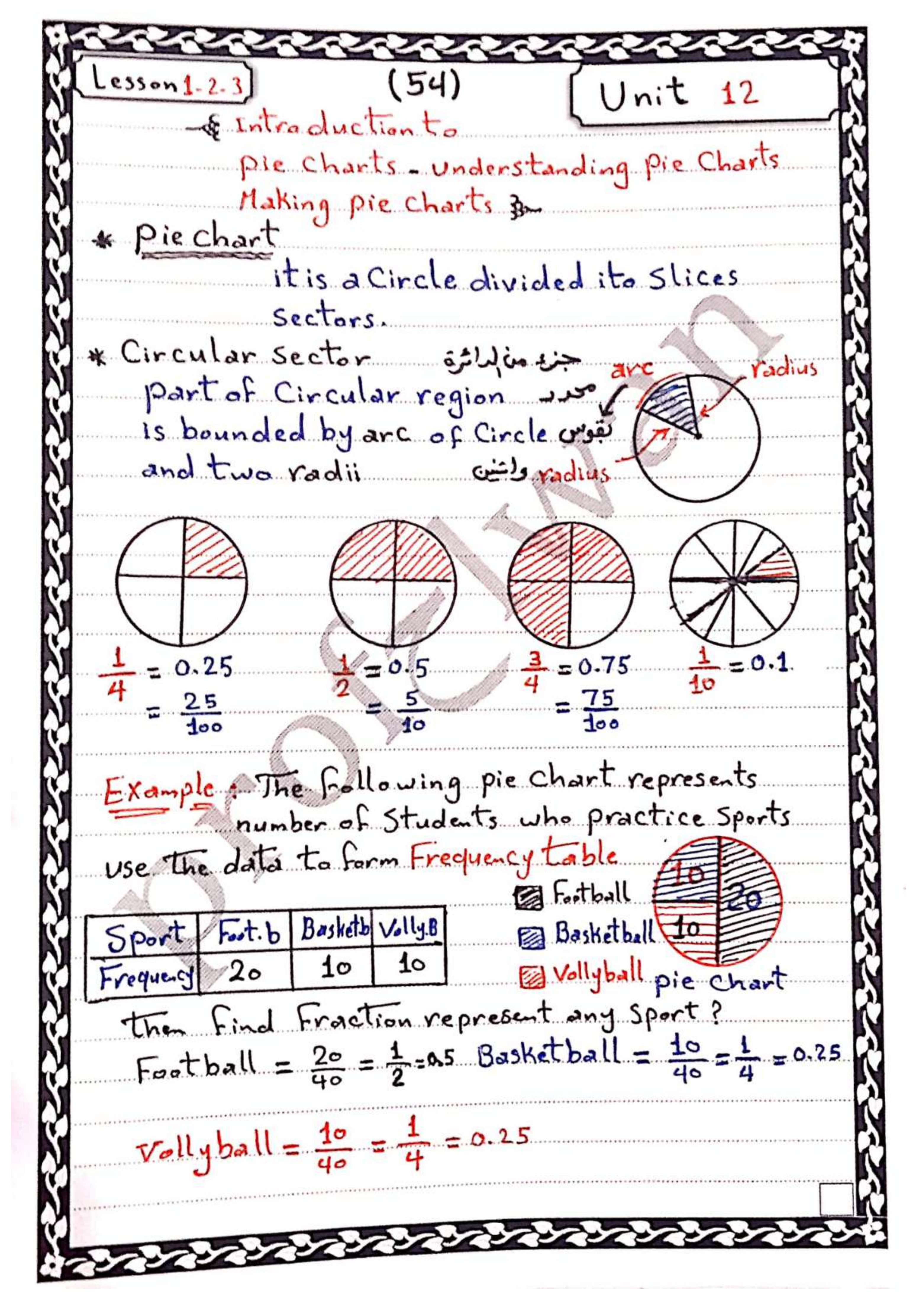
$w = 40 m$

$h = \frac{V}{L \times w} = \frac{36000}{60 \times 40} = 15 \text{ cm}$

(3) A builder used 100 bricks for building up a wall. If each brick is in the shape of cuboid of dimensions 25, 12 and 6 cm. Calculate the volume of the wall?

Volume of one brick $= 25 \times 12 \times 6$
$= 1800 \text{ cm}^3$

Volume of the wall $= 1800 \times 100$
$= 180000 \text{ cm}^3$



Introduction to pie Charts - Understanding pie Charts Making pie Charts

* **Pie Chart**

  it is a Circle divided ito Slices Sectors.

* **Circular Sector** جزء من الدائرة

  part of Circular region محدد is bounded by arc of Circle بقوس and two radii ونصفين

$\frac{1}{4} = 0.25 = \frac{25}{100}$ $\frac{1}{2} = 0.5 = \frac{5}{10}$ $\frac{3}{4} = 0.75 = \frac{75}{100}$ $\frac{1}{10} = 0.1$

Example: The following pie chart represents number of Students who practice Sports use the data to form Frequency table

Sport	Foot.b	Basketb	Volly.B
Frequency	20	10	10

then find Fraction represent any Sport?

Football $= \frac{20}{40} = \frac{1}{2} = 0.5$ Basketball $= \frac{10}{40} = \frac{1}{4} = 0.25$

Vollyball $= \frac{10}{40} = \frac{1}{4} = 0.25$

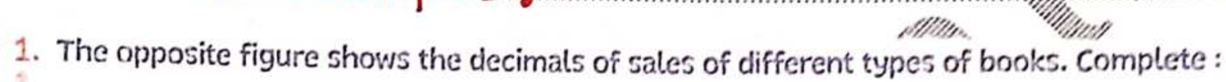
Sport	Foot	Basket	Volly
Fraction	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$

Fractions

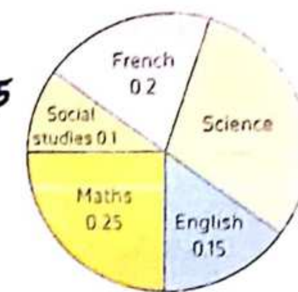
Sport	Foot	Basket	Volly
Decimal	0.5	0.25	0.25

Decimals

Another examples :



1. The opposite figure shows the decimals of sales of different types of books. Complete :

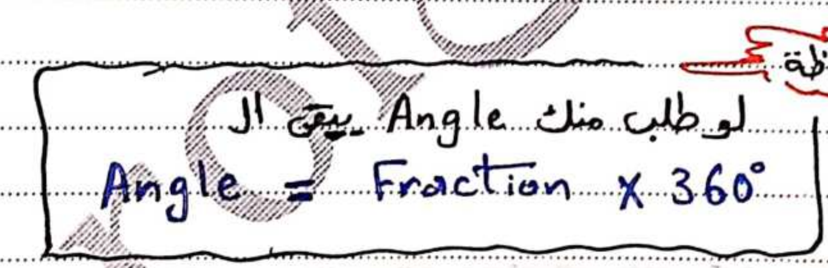


a. The sales decimal of French books is **0.2**

b. The sales decimal of Science books is $(1 - 0.2 - 0.1 - 0.25 - 0.15) = 0.3$

c. The least sales decimal is in (الأقل) **Social Studies**

d. The ascending order of books types according to the decimals of sales is : **S. S**, **English**, **French**, **Maths** and **Science**

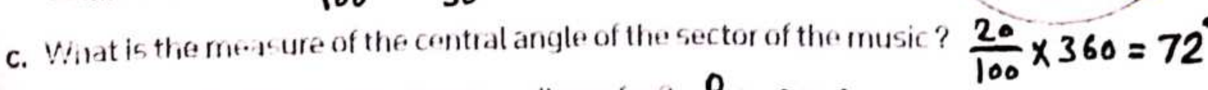


2. The opposite figure shows the favorite hobbies for 100 pupils in the fifth primary, study the figure, then answer. $22 + 25 + 18 + 20 + 15 = 100$

School broadcast 22 | Theatre 25 | School press 18 | Music 20 | Rangers 15

a. What is the fraction of the theatre with respect to all hobbies? $\frac{25}{100} = \frac{1}{4}$

b. What is the fraction of the broadcast with respect to all hobbies? $\frac{22}{100} = \frac{11}{50}$



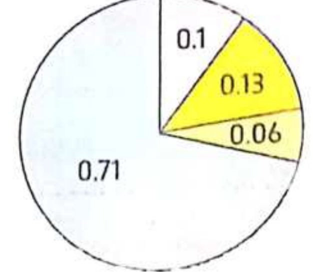
c. What is the measure of the central angle of the sector of the music? $\frac{20}{100} \times 360 = 72^\circ$

d. What is the hobby that the least pupils prefer? **Rangers**

e. What is the hobby that the most pupils prefer? **Theatre**

3. The opposite figure shows the distribution of the natural components of the earth's surface, study the figure, then complete the following table.

The components of the earth's surface	Water natural supplies	Vallies	Hills	Mountains
The decimal of the forming	0.71	0.13	0.06	0.1

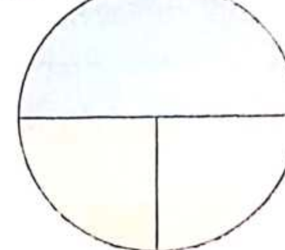


a. What is the component which represents the smallest decimal of the earth's surface? Hills

b. What is the component which represents the greatest decimal of the earth's surface? water

4. The following table shows the number of students who practice sports. Represent these data using the pie chart on the opposite figure.

Sport	Football	Basketball	Volleyball
Number of students	20	10	10



بلاحل يا بطل

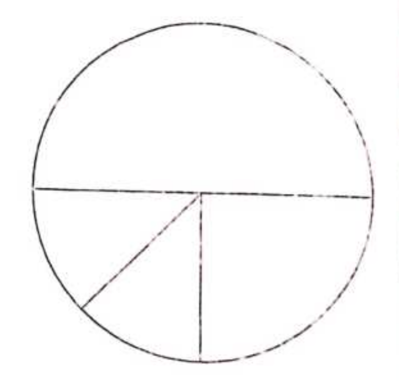
5. When some students were asked about the most popular TV programs, the following data were extracted

$\frac{1}{2}$ of the students like to watch Sports programs.

$\frac{1}{4}$ of the students like to watch Cultural programs.

$\frac{1}{8}$ of the students like to watch Arabic and foreign movies.

$\frac{1}{8}$ of the students like to watch news.



ارسم

a. Represent that given data using the opposite pie chart.

b. if the number of all students was 48 students, what is the number of students who prefer watching each type of programs?

6. The following table shows the fractions of the number of hours that Marwa studied in different subjects in a week.

Subject	Arabic	Maths	Science	English
Fraction	$\frac{1}{10}$	$\frac{2}{5}$	$\frac{1}{5}$	$\frac{3}{10}$

Represent these data by the opposite pie chart.

7. For each task, select the circular degrees that match the fraction of the circle that is shaded. (A circle has 360 degrees).

a.
A. 180° B. 45°
C. 60° D. 90°

b.
A. 180° B. 90°
C. 120° D. 45°

c.
A. 50° B. 120°
C. 60° D. 30°

d.
A. 60° B. 270°
C. 150° D. 120°

e.
A. 45° B. 60°
C. 30° D. 90°

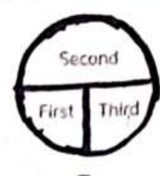
8. The following table shows the fractions of chicken production for three farms during October:

The farm	First	Second	Third
The fractions	$\frac{1}{4}$	$\frac{1}{2}$	......

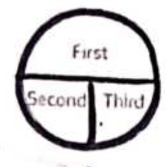
, then the representation of these data by the pie chart is ......



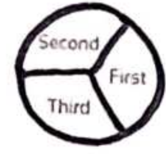
A.



B.



C.



D.

تم بحمد الله في أول ليلة من رمضان 1444 هـ

